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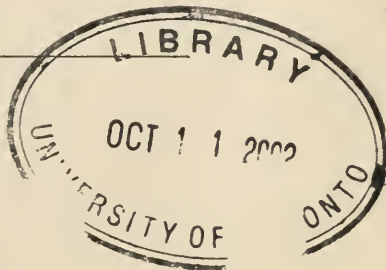
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CONTENTS.

	Page		Page
A new plan of extracting foreign bodies from the Ear.....	184	Croup	204
Ablation of neck of pregnant womb in Cancer.....	282	Cure for Corns.....	259
Abortive treatment of Boils and Whitlow.....	162	Cure for the Itch	187
Absolute rest in Orchitis.....	234	Cyanosis removed by Iodide of Potassium.....	45
Ammonia in Suspended Animation	184	Death from Criminal Abortion	251
Arsenic in Dyspepsia	235	Dilatation of the Anus and Rectum	258
Aspirator Trocar.....	184	Diseases of the Ear in children.....	202
Asthma	162	Disease of Ear, followed by Abscess of Brain	276
Bell, John, M.A., M.D., C.M., on Imperforate Hymen...	101	Diseases of the Urinary Organs.....	114
Bell, John, M.A., M.D., on a case of Cerebro-Spinal Meningitis.....	241	Early Diagnosis of Typhoid Fever.....	18
Bessey, W. E., M.D., C.M., on the abortive treatment of Small Pox.....	122	Editorial.	
Bessey, W. E., M.D., C.M., on the therapeutic value Alcohol.....	25, 56, 73, 103	To our readers	20
Bessey, W. E., M.D., C.M., on the use of Alcoholic stimulants by Nursing Mothers	195	The Canada Medical Association	21
Belladonna in Opium Poisoning	256	The late Dr. Fraser.....	22
Belladonna in Sweating.....	281	Personal.....	23, 48, 72, 95, 117, 134, 166, 214, 239, 262, 284
Births, Marriages, and Deaths.....	24, 48, 96, 120, 144, 168, 192, 216, 240, 264	Convocation of Victoria College.....	23
Blisters in Pneumonia	162	To our Exchanges.....	45
Blister treatment of Rheumatism	255	Opening of the Montreal Medical Schools	45
Boracic Acid as a preservative of Milk	281	Medical Cases in Courts of Law.....	45
Borax in loss of Voice	185	The recent Election at the Montreal General Hospital	46
Bromide of Potassium in Epilepsy.....	131	Medical Ethics	47
Bromide of Potassium in Vomiting of Pregnancy.....	178	The Canadian Medical Association	71
Campbell, Francis W., A.M., M.D., L.R.C.P., Lond., on a case of Acute Purpura in a child two days old..	170	The late Dr. Agnew, Toronto	72
Campbell, Francis W., A.M., M.D., L.R.C.P., Lond., on a case of Intermittent Fever	126	To our Subscribers	72, 133, 166, 211, 239, 262, 284
Camel's hair brushes for cleaning wounds	281	Opening of Medical Schools in Montreal	89
Cancrum Oris.....	14	" " " Toronto and Kingston	91
Carbolic Acid in Hydrocele	161	Medico-Chirurgical Society of Montreal, 91, 119, 137, 192, 216, 239, 287	
Carbolic Acid in Pruritus.....	237	Brantford County Medical Association.....	95, 284
Carbonic Acid inhalations in Acute Bronchitis.....	116	Clinical Lectures at the Toronto Hospital.....	95
Carbuncle and Boils treated with Nitrate of Silver....	163	Montreal College of Pharmacy.....	95
Case of Poisoning by Carbolic Acid.....	225	Montreal as a Centre for Medical Education.....	116
Cerebro-Spinal Meningitis.....	186	The Amalgam Question.....	133
Chloral in Incontinence of Urine.....	279	An Anti-Vaccination Movement.....	134
Chloral in Puerperal Convulsions	159	To Correspondents.....	134, 285
Chloride of Potassium in Epilepsy.....	237	Cyano-Pancreatine	134
Chloroform in Parturition.....	232	Artificial Limbs	165
Chlorodyne	133	Professional Remuneration.....	165
Chronic Urethral Discharges.....	133	Savory & Moore's Genuine Pancreatic Emulsion.....	187
Clinical Lecture on Eczema Palpebrarum	9	Hamilton Medical and Surgical Society	187
Clinical Lecture on Erythematous Lupus.....	15	Parson puffing a Medico in a Sermon	187
Clinical Thermometry	130	Marine Hospital Service Report (U. S.).....	187
Colds—stop them	203	Obituary Notices.....	188, 189, 214
Cold Water treatment of Abdominal Typhus	164	Words of Encouragement	211
Collodion in Erysipelas	259	University of McGill College.....	211
Colotomy for Intestinal Obstruction	234	Medical Faculty Bishop's College.....	212
Concealed Post Partum Hemorrhage	42	Creditable to Canadians	212
Correspondence.		Supply and Demand.....	237
Letter from London	29	Montreal General Hospital.....	238, 259
Diogenes, jun.....	109	Chemistry Chair in Bishop's College.....	238
Poisoned by Mercury from Tooth-filling. W.G.B. ...	127	Second Convocation Medical Faculty Bishop's College	238
Letter from Sigma.....	246	The Ontario College of Pharmacy	238
		Special Notices	239
		A New Hospital in Montreal	260
		Pharmaceutical Education in the Province of Quebec	261
		College of Physicians and Surgeons of Lower Canada	261
		Victoria Medical College, Toronto	262
		Trinity College, Toronto	262

	Page		Page
McGill College, Montreal.....	262	Morphia and Chloral	161
Openings for Medical Men	262	Muriate of Ammonia in Bronchitis.....	229
American Medical Association	262	MacKelcan, George L., M.D., on a case of Fractured	
Nurses in Montreal	283	Rib, Emphysema and Pneumothorax—Paracen-	
Cerebro-Spinal Meningitis	284	tasis Thoracis	217
Eight children at one time	162	Nelson, Wolfred, C.M., M.D., on Charbon.....	148
Electrolysis in Palato Nasal-Polypi.....	186	New Method of treating Functional Dyspepsia. By	
Enlarged Testicle	161	Brown Sequard.....	174
Ergotine as a Hemostatic.....	281	New Method of treating Hydrocele	206
External use of Turpentine in Tonsillitis	258	New Operation for Thoracis Paracentesis	281
Fibroid Tumors of the Uterus	278	Nitro-Muriatic Acid as an Hepatic Stimulant	183
Fibrous Disease of the Uterus.....	10	Ointment for Piles.....	236
Flint Austin, M.D., on Acute Articular Rheumatism....	270	On a means of intensifying Cardiac Murmurs.....	236
Formulae for Headache after debauch.....	281	On Nervous or Sick Headache.....	112
Gardner, William, A.M., M.D., C.M., cases of Cerebro-		On the administration of Stimulants in Fever	69
Spinal Meningitis	1	On the use of Pulvis Glycyrrhizæ Compositus.....	129
Godfrey Robert T., M.D., Address to the Graduates in		Oxide of Zinc Ointment.....	234
Medicine of Bishop's College.....	217	Pancreatic Emulsion in the Wasting Diseases of Chil-	
Gross, Professor, treatment of Goitre	161	dren.....	208
Gurana, a remedy for Sick Headache	43	Per Chloride of Iron in Variola	234
Hæmorrhoids in Pregnant and Puerperal Women.....	38	Perrigo, James, M.A., M.D., C.M., M.R.C.S., Eng., on the	
Heart Sounds	19	St. Johns Sisterhood of Nurses.....	3
Hingston, William H., M.D., D.C.L., L.R.C.S.E., on		Perrigo, James, M.A., M.D., C.M., M.R.C.S., Eng., on the	
Lithotripsy and Lithotomy	97	Tincture of Muriate of Iron in Epistaxis	193
Hingston, William H., M.D., D.C.L., L.R.C.S.E., on		Pertussis, Fluid Extract of Castanea Vesca in.....	185
Removal of Tongue and Lower Jaw	169	Poisoning from Mercury by toothfilling	115
How to remove Adhesive Plaster	281	Pomade in Loss of Hair.....	236
Hyposulphites in Toothache of Pregnancy.....	161	Powdered Acetate of Lead for Hæmorrhoids	237
Hypodermic use of Strychnia	178	Powder Stomachique	161
Incontinence of Urine in children.....	163	Prediction of Sex in Utero	163
Infantile Diarrhœa	280	Pressure on the Carotids to control Intercranial Circu-	
Infantile Paralysis	161	lation	182
Inflammation of the Ovary	254	Prophylamin in Acute Rheumatism.....	234
Ingrowing Toe Nail	186	Puerperal Fever	5
Instant arrest of Epistaxis.....	236	Pruritus Vulvæ	237
Internal hæmorrhoids treated without operation	164	Pruritus compared with Ergot.....	132
Intra Uterine Injections.....	249	Receipt for Beef Tea.....	163
Injections of Perchloride of Iron in Post Partum		Récord Dr. on Syphilis	65
Hæmorrhage	273	Remedy for Hæmoptysis	116
Kennedy, Richard A., M.A., M.D., C.M., on a case of		Removing foreign bodies from the Nose.....	184
Melanosis of the Eyeball.....	145	Report of Meeting of Canadian Medical Association at	
Laminaria Tents	19	Montreal	56
Large doses of Belladonna in Whooping Cough	234	Report on Nutrient Enemata	174
Laxative Pill	281	Report on Uremia.....	176
Lecture on Lupus	246		
Management of Obstinate Pruritis.....	162		
Medicinal Properties of Bromide of Potassium.....	180		
Medical Items and News.		Reviews.	
Nitrate of Silver in Bed Sores—Blood letting—Re-		The Physician's Visiting List.....	118
medy for painful wounds—Castor Oil made palat-		Lithotomy and Lithotripsy. By Gordon Buck, M.D....	134
able—The Bath in Small Pox—Local application		Aural Catarrh, and Curable Deafness. By Peter	
of Chloral Hydrate—A Vaccination Martyr—		Allan, M.D., F.R.S., Ed.....	136
Wash for Chilblains—Treatment of Chronic		The Vienna Hospital Treatment of Venereal Diseases	136
Diarrhœa—Marriages, Deaths, &c.....	24	Lessons in Physical Diagnosis. By Alfred L. Loomis,	
Sore Nipples—Remedy for Gonorrhœa—Remedy for		M.D.....	136
Hooping Cough—Marriages	48	Urinary Diseases of Dr. William Roberts	166
Hyposulphites in the Toothache of Pregnancy—Sul-		Pathology—Diagnosis and Treatment of Women,	
phate of Iron in Erysipelas—Removal of Corns—		including the Diagnosis of Pregnancy. By Dr.	
Hyperæsthesia of the Vagina—Galvanic Treat-		G. Hewitt	168
ment of Bed Sores—Births, Marriages and Deaths	96	Surgical Diseases of Infants. By M. P. Guersant.....	190
Constipation—Treatment of Asthma	144	Report of Medical Superintendent Toronto Insane	
Remedy for Catarrh	168	Hospital	190
Monobromide of Camphor.....	184	Diseases of Women. By Dr. Athill.....	215
Montreal School of Medicine Introductory Lecture, by		Florida and South Carolina as Health Resorts.....	263
Professor d'Orsonnens	88	Swayne's Obstetric Aphorisms	264
		Clinical Lectures. By N. S. Davis.....	285
		A System of Oral Surgery. By Garretson.....	887
		Rupture of the Uterus with abdominal Section.....	39

	Page		Page
Salacin in obstinate Diarrhœa.....	258	Treatment of Gleet by Medicated Bougies	258
Senna Coffee.....	236	Treatment of Gonorrhœa	237
Sermon, George, M.R.C.V.S., on a case of Filaria Oculi	173	Treatment of Head injuries	232
Shaw, George B., C.M., M.D., Valedictory Address on		Treatment of Night Sweats.....	236
behalf of the Graduates in Medicine of Bishop's		Treatment for Parasites	235
College.....	219	Treatment of Pleurisy (Ainstie)	230
Simple substitute for the poultice.....	161	Treatment of Pleurisy	132
Slack, George F., C.M., M.D., M.R.C.S., Eng., on Two		Treatment of the rigidity of the Os Uteri.....	128
years and a half in a London General Hospital,		Treatment of Ringworm	115
121, 150, 171, 193, 223, 244,	265	Treatment of Scarlatina	210
Spasmodic Asthma.....	31	Treatment of Small Pox	43
Spotted Fever and its treatment.....	14	Treatment of Spermatorrhœa	17, 159
Strychnia in Nervous Affections.....	253	Treatment of Spinal Curvature.....	41
Successful ligation of the right Carotid Artery for		Treatment of Strumous Ophthalmia.....	257
Aneurism	71	Treatment of Suppurating Buboës.....	12
Sudden Death in Puerpural cases.....	152	Treatment of Syphilis by injections of Calomel.....	257
Sunstroke	12	Treatment of Whooping Cough by extract of Chesnut	
Tabb, Silas, M.A., M.D., C.M., on Poisoning by Opium	4	leaves	278
Testing Urine for Biliary Acids.....	236	Treatment of Whooping Cough by Quinine.....	266
The cause of Collapse in Diphtheria.....	282	Trenholme, Edward H., A.M., M.D., C.M., B.C.L., on a	
The Cure of Stammering	183	case of Abdominal Tumor.....	99
The Libel case, Bowker vs. Beers	282	Trenholme, Edward H., A.M., M.D., C.M., B.C.L., on a	
The Profession in Philadelphia	282	case of obstruction of the Ductus Communis Cho-	
The safest place in a thunder storm.....	181	ledochus by malignant growth	147
The Symptoms of Acute Rheumatism	109	Trenholme, Edward H., A.M., M.D., C.M., B.C.L., on a	
The use of Nitrate of Silver in Testitis and Carbuncle	44	case of Rheumatism of the Gravid Uterus.....	241
Therapeutic value of the Muriate of Lime	159	Tonic tooth powder	279
Tincture of Iron for Corns	236	University of McGill College, Introductory Lecture to	
Treatment of Asthma.....	160	Fortieth Session, by Professor Wright.....	75
Treatment of Cancrum Oris	162	University of Bishop's College, Introductory Lecture	
Treatment of Chilblains.....	235, 236	to Second Session, by Professor Francis W.	
Treatment of Chronic Diarrhœa in young children.....	200	Campbell	82
Treatment of Dropsy.....	35	Use of the Bowl during delivery.....	162
Treatment of Dysmenorrhœa.....	235	Uses of Chloride of Ammonium	186
Treatment of the Febrile State, by Dr. Aikin	226	Variola and Typhus Fever occurring simultaneously..	181
Treatment of Fibroid Tumors of Uterus by subcuta-		Veratrum Viride as an Hæmostatic.....	186, 237
neous injections of Ergotine.....	279	Ye ancient Doctor.....	236



Original Communications.

Cases of Cerebro-Spinal Fever. By WILLIAM GARDNER, M.A., M.D., C.M., Professor of Medical Jurisprudence, University of Bishop's College.

I am induced to publish the two following cases of this disease, thinking that they may be of interest to the Profession, from the fact of their being typical cases of two different forms of the disease, the Simple and Purpuric, as described by Mr. J. Netten Radcliffe, in the second volume of Reynold's System of Medicine, and also from the fact of this having been, until within a few months, a rare disease in this city.

Case No. 1.—Frank C., a healthy little boy, æt. 10, was quite well on Sunday, 12th May last, when, having eaten a hearty dinner, he was seized with rigors, vomiting, headache, delirium, thirst, and other symptoms of high fever, which continued throughout the rest of the day and a part of the night following, when he commenced to perspire and then slept for some time. I first saw him at 11 a.m. of Monday, the 13th. He lay quiet; his skin damp, his clothing still wet from the perspiration, which had been profuse. The face presented a peculiar, vacant expression; when spoken to, he looked up and answered questions, but immediately relapsed to a semi-stupid state, in which the mind evidently wandered. The tongue was coated, and the bowels confined; the pulse 130; the temperature 101° . Ordered a dose of castor oil. I saw him again at 5 p.m. of the same day. The pulse as at last visit; the temperature is now $105\frac{2}{3}^{\circ}$. He is very restless, and in a condition of wild excited delirium. The vomiting, which had ceased with the subsidence of the fever, has returned, and now everything is rejected; has complained once of pains about his knees; there is, however, no swelling or redness of these joints, and they are not tender. Prescribed quinine in doses of 3 grains every three hours, with the view of reducing the high temperature; at 11 p.m. of the same day the pulse is 126; the temperature 100° ; the patient is quieter, but still delirious, and the vomiting continues. There are now present on the back and front of the chest, and on the abdomen, a number of petechial-looking spots, they are of small size, somewhat irregular in outline, purple in colour, and cannot be effaced by pressure.

Tuesday, 14th May, 10.30 a.m.—Has passed a restless, delirious night, and is in much the same

condition as at last report; 11.30 p.m., pulse 120; temperature $101\frac{1}{2}^{\circ}$, is apparently worse since morning, more delirious. The vomiting is less frequent. The head is forcibly retracted from spasmodic contraction of the muscles of the nape of the neck; there is rigidity of the hamstring muscles, the tendons standing out sharply against the skin, and a condition of semi-riapism exists.

Wednesday, 15th, 11 a.m.—Has passed a very bad night, having been very much excited with delirium of a wild character. The pulse is variable; from 96 to 120 during the visit, the beats are, however, of equal force; the temperature $101\frac{2}{3}^{\circ}$; vomiting has almost ceased; rigidity of the muscles of the nape and recti abdominis well marked; there is some squinting, the pupils are equal. Patient gives evidence of general hyperæsthesia.

Dr. Howard saw the patient with me in consultation this morning. The patient was ordered the following draught:

℞ pot. bromid grs. v.
Potass iodid gr iss.
Ext. ergot fluid miii.
Tinct. cinchon m xv.
Aque $\frac{3}{4}$ ss.

to be given every two hours, also an ointment consisting of equal parts biniodide of mercury and belladonna ointments, to be rubbed into the whole length of the spinal column every four hours. Special attention was also ordered to be directed to the feeding of the patient with milk, beef-tea, etc. 11.30 p.m. temperature, $100\frac{4}{5}^{\circ}$, pulse varies from 80 to 100. He is somewhat quieter, the delirium being of a less noisy character than this morning. His mental condition is somewhat peculiar; he lies quiet generally, but at intervals starts up, apparently under the influence of some delusion; the vomiting has ceased entirely, the bowels costive.

Thursday, 16th, 10.30 a.m. Temperature $100\frac{4}{5}^{\circ}$; pulse 82. Has passed a quiet night, but seems more lethargic than heretofore, although he can still be roused to consciousness; passes urine under him in bed; the petechial spots are disappearing, and no new ones are being formed. There is a copious eruption of herpes about the chin and lips; there is also livid, red, tender swelling of anterior and outer part of right ankle; condition otherwise as before; takes milk and beef-tee quite freely. 11.30 p.m., pulse 105; temperature $101\frac{1}{2}^{\circ}$. Ordered 5 grs. calomel to be followed at end of six hours by a teaspoonful of epsom salts.

Friday, 17th, 10.30 a.m.—Pulse 96; temperature $101\frac{2}{3}^{\circ}$, bowels moved; has passed the night fairly well. 11 p.m., pulse 118; temperature $102\frac{2}{3}^{\circ}$;

is somewhat more talkative and rambling than yesterday.

Saturday, 18th 10 a.m.—Pulse 125; temperature $101\frac{1}{2}^{\circ}$. Has passed a very restless night; pupils more than usually sensitive to light and somewhat contracted; the muscles of arms and legs not rigid; those of nape and abdomen as before; there is considerable swelling of right ankle joint. 10 p.m., pulse 120; temperature 102° ; is more conscious and rational than for a day or two; recognizes those around him; ordered a sedative draught of bromide of potassium at bed time to relieve restlessness.

20th, 10.30 a.m.—Pulse 122; temperature $103\frac{1}{2}^{\circ}$. Passed a quiet night, but complains of headache, for which ice is ordered to be applied to the head, also an injection to move the bowels.

21st, 10.30 a.m.—Pulse 130; temperature $104\frac{1}{2}^{\circ}$. The only new symptom to record to-day is the occurrence of starting of the whole body. Ordered the application of ice to spine. Also, in addition to other treatment, a dessertspoonful of claret every three hours.

22nd, 11 a.m.—Pulse 120; temperature $103\frac{1}{2}^{\circ}$. Has rested well, on one occasion sleeping for two hours together.

23rd, 11 a.m.—Pulse 126; temperature $103\frac{1}{2}^{\circ}$; was restless this morning, apparently at the time of the rise of the temperature. There is an accumulation of mucus about the eyes, producing that filmy appearance of the cornea, so commonly seen in the later stages of brain disease. 11 p.m., pulse 126; temperature $104\frac{1}{2}^{\circ}$. He has been more than usually talkative and rambling to-day.

24th, 11 a.m.—Pulse 108; temperature 101° . Slept well last night. The effusion into the ankle-joint is much reduced; no other change to report. 11 p.m., pulse 126; temperature $103\frac{1}{2}^{\circ}$.

25th.—Pulse 126; temperature $103\frac{1}{2}^{\circ}$; is quiet, apparently inclined to sleep almost constantly. The dose of bromide potass is in consequence to be lessened to 2 grs. every two hours, and that of the tinct. chinchonae to be increased to m. xx.

27th, 12 m.—Pulse 120; temperature $104\frac{1}{2}^{\circ}$. 11.30 p.m., pulse 118; temperature $104\frac{1}{2}^{\circ}$. The retraction of the head and rigidity of the hamstring muscles, which had been very much diminished for a few days past, is to-day somewhat increased.

30th.—Pulse 130; temperature $103\frac{1}{2}^{\circ}$. There is well marked risus sardonicus; does not take food so well; other symptoms are unchanged.

June 1st. Is much worse to-day, having been nearly insensible since yesterday morning. There is rigidity of the whole trunk, very little action of

respiratory muscles, and very little food is taken; pupils somewhat dilated; pulse 144, weak; temperature 102° . Ordered head to be shaved, and biniodide of mercury ointment, 20 grs. to the ounce, to be rubbed into the scalp every four hours.

June 2nd.—Condition unchanged. No vesication has been produced by the ointment; consequently a fly blister is to be substituted. I received a message this p.m. to say that my services were no longer required, as Homœopathy had been called in.

From this date for about ten days, I did not see the patient, but at the expiration of that period, having been called to attend the child's father at his residence, I saw him occasionally until his death. The urgent symptoms present on the occasion of my last visit had of course passed away. The patient had become intensely emaciated, gave very little evidence of consciousness, and did not speak. He took nourishment fairly well when offered to him, and the evacuations were passed unconsciously. The pupils were natural; the rigidity of the muscles of the nape and trunk still persisted, so much so that, on attempting to turn him on his side, one was reminded of a dead body in rigor mortis. When thus moved the only evidence of consciousness begave was to whine or moan. The abdomen was retracted, the bowels costive, never being moved except by injection. The effusion into the ankle joint had long ago entirely disappeared, as also the herpes about the face. In this condition he remained with comparatively little change until the last time I saw him, which was about a week before he died. Death took place during the eighth week of the disease.

Case No. 2.—L. C., a healthy, lively little girl, æt. 11, had always enjoyed good health up to the date of the illness about to be described, with the exception of an attack of scarlet fever five years previous, from which she recovered perfectly.

The patient was seized at midnight of the 25th June, 1872, with a very severe rigor. I was sent for almost immediately, and reached the house before the rigor had passed off. On inquiry I found that she had been quite as well as usual during the day, (appetite and spirits being good) except that she had complained of a little pain down the left side of the neck, and slight sore throat. The patient now complained of some headache, thirst, etc, and the pulse was rapid—144. I did not, at this early period of the illness, apprehend anything serious, and soon left the house, having prescribed a mixture containing small doses of Tincture of Aconite to be given at intervals during the night. I was again sent for

hurriedly at half-past seven the next morning. On reaching the patient's bed-side, which I did shortly after, being about 8 hours from the setting in of the symptoms, I was told by the friends that she had had two attacks of rigidity of the muscles, of the limbs and trunk, during which the head was somewhat retracted, and which had passed off in a few seconds. On inquiry I found that she had vomited several times during the night, had been very thirsty, had slept at intervals, occasionally for one hour together, and that, when awake, she had been somewhat incoherent and rambling. Her pulse now was still 144, temp. 105 $\frac{1}{4}$. She is sufficiently intelligent to answer my questions correctly, and to put out her tongue when asked to do so, etc., but when left alone she is delirious. On looking at the skin I detected a number of spots, livid in color, irregular in size and shapes, some small, no larger than pin-heads; others in size equal to half the surface of a five-cent piece. They could not be made to disappear by pressure, and were not at all elevated. In short they possessed all the characters of petechiæ. The case was certainly serious enough now, in its characters. I ordered a sinapism to the epigastrium, beef tea in small quantities, ice, etc. The symptoms became aggravated during the day: the petechiæ becoming more numerous, the vomiting incessant, delirium more marked, and the paroxysms of rigidity recurring at shorter intervals. In addition to the previous symptoms diarrhœa now set in, not to any great extent, however.

Dr. Craik saw the patient with me this afternoon in consultation. In addition to the previous treatment Quinine was now prescribed in 2 grain doses in pill every three hours, and champagne in small quantities, etc. Everything was vomited, however; the vomited matters about 9 o'clock p.m. assuming the characters of coffee grounds, indicating hæmorrhage from the gastric mucous membrane. The patient became comatose, and gradually sank, dying at 4 o'clock on the 27th, having been ill about 28 hours only.

Montreal, July, 1872.

A short account of St. John's House and Sisterhood.

By JAS. PERRIGO, A.M., M.D., M.R.C.S.,
Eng., Demonstrator of Anatomy, University
of Bishops College.

St. John's House and Sisterhood was founded in the year 1848, and owes its existence to a need very generally felt about that time for a better class of nurses for the sick. Few or no attempts had up to that time been made in England to give nurses an

efficient hospital training, or indeed a systematic education of any sort, still less to elevate and refine their motives, by leading them to regard their work as a religious one.

The design of the Institution is to improve the qualifications and to raise the character of nurses for the sick, by providing for them professional training, together with moral and religious discipline, under the care of a Lady Superior, and resident sisters, aided by a clergyman as Chaplain. The ladies who become resident sisters submit to no vows of poverty, no monastic obedience; there is no cloistered seclusion, no control exercised over the will or conscience.

The Institution derives its name from having had its residence in the district of St. John the Evangelist, in Pancras, London. In 1852, it removed to Queen's Square, Westminster, several of its nurses being admitted to the Westminster Hospital to be trained. In 1854, it provided some of the first nurses accompanying Miss Nightingale to the Crimea, and in the following year prepared and sent more than twenty lady nurses to the seat of war.

In 1856, having entered on the nursing of King's College Hospital, it was found advisable to move nearer to this fresh field of work. The house was therefore moved to Norfolk street, Strand.

During the year of cholera in London, several sisters and nurses were sent to give their help in necessitous districts. In 1865, the nursing of the Galignani English Hospital at Paris was undertaken, and in 1866, that of Charing-Cross Hospital, and since then, others.

In 1870, the large colliery village of Coalville, in Staffordshire, was visited by typhoid fever in an epidemic form, threatening at one time to involve the whole of the inhabitants. Two nurses were sent down, who, in commencing their work found more than 100 cases of fever: in several instances the father or mother, and four or five children were all ill at the same time.

The panic being great, no one could be found to attend the dying people. Cheered, however, by the presence of the nurses, the sick were in ten days reduced to 65, and in six weeks the fever was subdued. Other districts of England have been supplied with nurses in the same manner.

During all this time, notwithstanding the large number of nurses required for these successive undertakings, the staff of private nurses continued to be employed in all parts of the country, thus bringing the benefits of good and tender nursing to many homes of the upper and middle classes, as well as to large numbers of the sick and suffering poor.

The Institution consists of a President, Council, Chaplain, a Lady Superior, and Sisters. It is at the house in Norfolk street that all matters relating to the general concerns of St. John's House are conducted. Here the Lady Superior resides with such sisters as are required for the works carried on more immediately in the House. The staff of nurses for private families also reside here. Services for the nurses are held in the chapel of the House.

The Lady Superior is at the head of the community, and is intrusted with the supervision of all the works undertaken by St. John's House. Of sisters, there are more classes than one: they who are able to devote all their time to the Institution, and they who can only devote a certain portion of the year. There are also Lady Associates, who by their outside influence can further the interests of the Institution. With rare exceptions, no one can become a sister of any class without having first been trained as a lady pupil.

The Council of St. John's House undertake the nursing of certain hospitals under special agreements with the managing boards. The domestics of the hospital, as well as the cooking and washing departments, are also in certain cases placed by the authorities under St. John's House. The Lady Superior places one of the Sisterhood in the hospital as Sister in charge, who is at the head of the nursing establishment there. Associated with and subordinate to her, are other sisters, who share between them the several wards and the domestic management, superintending the work of nursing and of training nurses. All the members of St. John's House, engaged in the hospital, remain subject to the sole authority of the Sister in charge and of the Lady Superior. In all medical and nursing matters, the sisters and nurses carry out the instructions of the medical staff, and act in strict subordination to them.

The nurses in training at hospitals are called Probationer Nurses, and live at the Mother House, Norfolk street, during their year of training, working daily at the Hospitals and returning to St. John's in the evening.

Families desiring the services of these nurses are obliged to pay a guinea per week, as also the travelling expenses going and coming. In fevers and infectious cases, the charge is one and half a guineas; Small-Pox cases, two guineas.

After eight weeks attendance on the same patient, the nurse must return home or be exchanged for another. As far as circumstances permit, nurses are always supplied to the poor gratuitously.

All money for the services of nurses are paid to

the Institution. No nurse is permitted to receive any gratuity in money or clothing.

Every probationer nurse, after her year's training is finished, is engaged for a term of three years, receiving a salary of ten guineas for the first year, and twenty for each of the other two, in addition to board, lodging and washing. If the nurse should engage for a second term of three years, she receives a salary of twenty-two guineas; and the fourth term, twenty-six guineas. On the satisfactory completion of the twelfth year of service, a gratuity of £10 is given to every approved nurse. In addition to all this, there are some articles of dress furnished by the Institution.

In this manner, St. John's House performs a vast amount of good, not only in affording the proper attention to patients in families, and the poor, but frequently to villages and towns suffering from epidemics. It also affords a good field for numbers of respectable but poor females to earn a livelihood.

The ladies of Montreal have been very successful in forming an educational association, which evidently has a brilliant future in store for it. If a few ladies were to unite themselves for the purpose of the facilitating the training of destitute but intelligent females as nurses, we are almost certain the hospital authorities would give them all the aid they possibly could.

Montreal has a very few good nurses, and if this were done, it would be supplying a want long felt, and also afford means for some respectable females to support themselves.

Montreal, July, 1872.

A case of Poisoning by Opium. By SILAS EVERETT TABB, A.M., M.D., Professor of Botany and Zoology, University of Bishop's College.

On June 1st, 1872, 11.30 a.m., I was called to visit one J. H., who was supposed to have taken laudanum with the intention of committing suicide. On seeing the patient, which was half an hour after taking the poison, I found her quite reasonable and self-possessed. Pulse 110. I also detected the odour of opium in her breath. She called me aside and informed me she had taken half an ounce of laudanum; but for what purpose, however, she would not disclose. I examined the bottle that was said to have contained the drug, and easily recognized the odor of opium. The patient had obtained the laudanum from a druggist on the pretence of having a very severe ear-ache.

Immediately after getting the above information, I administered twenty grains of sulphate of zinc,

and followed it by copious draughts of warm water. Emesis was soon produced, and the ejected matter resembled closely in odor and appearance a quart of water to which had been added half an ounce of tincture of opii. By this time the young woman's friends became quite alarmed and desired me to call in another medical man in consultation; whereupon I suggested Dr. Perrigo's name. Dr. P. was forthwith summoned, and we watched the case together.

At 12.30 p.m., the drug began to produce its narcotic influence on the system. The pupils were somewhat contracted; pulse 120 and compressible, face flushed, eyelids red, patient restless and drowsy, and complained of numbness of the limbs, tightness of the chest, and a sense of constriction about the throat, and repeatedly affirmed that we wished to smother her.

Soon after Dr. P.'s arrival we administered an additional ten grains of sulphate of zinc. Now the vomited matter consisted almost wholly of the water administered, containing only a few particles, like bread crumbs, and emitting very faintly the odor of opium.

After the physiological effects of the drug began to manifest themselves we kept the patient moving about, allowing her at intervals to sit down for a few moments. During these intervals electricity was applied with apparently good effect, but as soon as she showed any inclination to sleep we had her on the move again, assisted by a friend. After 2 p.m. she had constantly to be kept walking about, and even then it was with difficulty that she could be kept awake.

About 2.30 p.m. she complained of abdominal pain, and half an hour later convulsive twitchings of the hands and arms were noticed. The objective condition of the patient at this time was as follows: face pale, surface cold and moist, lips and nails livid, pupils contracted and only slightly sensible to light, pulse 120. The patient also complained of a sense of fullness in her head.

We now put her feet into hot water and mustard, and applied cold effusions to her head, neck and shoulders. At this stage electricity was again applied. In a short time the patient began to improve, the narcotic (soporific) effects of the poison began to wear away, the expression of countenance became less stupid, eyes became brighter, pupils more dilated and sensible to light, but the sense of languor remained; pulse still 120; respiration rather slower than natural.

Shortly after midnight the patient fell asleep and slept for four hours. On waking she complained of

headache. In this condition I found her when I made my morning visit. I ordered her nourishing diet and a quinine mixture (gr. ss. ter die). Recovery was complete in a few days.

Montreal, July, 1872.

SIR HENRY HOLLAND, M. D.,

whose *Recollections*, lately published, is an entertaining record of a half century of professional life, says that very early in his practice he determined that he must never allow his work so to engross him as that he should not be able to give two months of each year to travel; and having made this resolution in the interest of health, long life, and the happy exercise of all the powers of his mind, some of which demanded regular travel into strange lands, he made the further resolution, in the interest of social enjoyment, that, during the ten months still remaining to him of his year, his earnings should never amount to more than a certain sum, and the whole of his time should never be mortgaged to his patients.

Progress of Medical Science.

ON PUERPERAL FEVER.

BY DR. EDWARD MARTIN, PROFESSOR OF CLINICAL MIDWIFERY IN THE UNIVERSITY OF BERLIN.

SINCE I had the honor of reading to this Society, in 1860, a Report on an Epidemic of Puerperal Fever, wherein I put forward the view that this disease depended upon a diphtheritic process set up in the female genital organs, I have omitted no opportunity of expanding and settling this doctrine; but if I venture to bring the subject again before you now, it is that I am impressed by the conviction that one reason why the views of this disease are still so divergent is, the confusion produced in the statistical reports by their comprising all the febrile diseases of lying-in women under the same rubric. Febrile conditions may be met with in lying-in women as well as in non-pregnant women, whether as a consequence of inflammation in almost any organ (but which has no connexion with the puerperal condition) or in connexion with various contagious diseases, as scarlatina, variola, etc. There may even be febrile affections consequent upon inflammatory action in the genitals of lying-in women, but which are essentially different from puerperal fever in the alarming sense of the word. Entirely unconnected with this, lying-in women may have very severe fever from inflammation of the breasts or nipples, after contusion or laceration of the uterus or vagina, as well as consequent on abscesses or ulceration which may ensue upon effusion of blood into the connective tissue. Such fever neither in its course, symptoms, or issue, resembles the conditions which arise from the diphtheritic process; and it is this which should be re-

garded as the essential characteristic of puerperal fever. Even the existence of thrombosis is not as a matter of course to be attributed to puerperal fever, as in many cases this remains entirely isolated, as contrasted with the thrombo-phlebitis which accompanies or follows the diphtheritic process.

Limiting in this way the conception of puerperal fever, the question naturally arises—What are we to understand by the “diphtheritic process”? You are aware that recent investigations have thrown most important light on the nature of diphtheria affecting other organs—especially the pharynx, where it has been shown to consist of a fungous formation, the spores of which are seen under the microscope to penetrate not only into the tissues, but within the bloodvessels—producing in this way a generalised disease. In diphtheria of the genital organs investigations have as yet not been extended thus far, and it remains a question calling for farther examination. Admitting, however, that the diphtheria is here due to a fungous formation, other questions arise. Is the fungus in question specifically different?—since we are familiar with various fungi which germinate in the vagina of both pregnant and non-pregnant women without giving rise to any dangerous affections;—is the fungus the mere carrier of the contagium? or is the puerperal fever produced in consequence of the special condition of lying-in women favoring the production of certain fungi, by reason of changes taking place in the organic substances and fluids?

Leaving these considerations, we may next advert to an examination of what the microscopico-anatomical basis of puerperal fever is. In the majority of cases we find on the external genitals and the vagina a diphtheritic deposit covering those wounded spots which, in the form of larger or smaller lacerations of the mucous membrane, so frequently occur during labor. The circumference of these spots is more or less considerably swollen. In many cases the diphtheritic deposit is thus confined to the external genitals, and the disease pursues its course by casting off the deposit without any or with very little general disturbance. But in the majority of cases coming under Medical recognition, the diphtheritis is not confined to the entrance of the vagina, but is found deep within the canal, covering the large or small lacerations of the os uteri, and within the cavity of the uterus itself. Here it occupies both the site of the placenta and the upper paries of the organ; and it is sometimes found exclusively here, and in no places accessible to the eye.

It may be objected that in many autopsies of women dying of puerperal fever no diphtheritic deposit has been found. This is a fact which I have myself verified in several instances, in which not only have the symptoms been present, but careful examination of the patient during life has shown the presence of the deposit. In explanation of this apparent contradiction, we must not forget that the diphtheritic deposit in many cases very quickly disappears, and especially when injections or caustics have been employed, while its consequences may persist and undergo farther development. That we

should not be able during life to see the diphtheritic deposit when within the uterus is conceivable enough, but the diphtheritic flocculi may be recognised in their expulsion with the returning uterine injections.

As a general rule, the diphtheritic process spreads rapidly from the genital organs, but it does so only rarely towards the skin of the thigh, nates, etc. These then exhibit an erythema (which has been well named puerperal scarlatina) or pass into ulceration. More frequently the diphtheria extends into the urethra or the rectum, if it have not already appeared there primarily; but its most common modes of spreading are either by means of the connective tissue surrounding the vagina and neck of the uterus, by the mucous membrane of the tubes to the peritoneum, or by the lymphatics and veins—these various modes of its extension being often combined with each other.

1. In the first of these modes, there is an infiltration of the pelvic cellular tissue, with a turbid serosity which extends to the peritoneal covering of the pelvic genital organs as far as the ovaries, there being usually also peritoneal effusion. This infiltration of the pelvic tissue may extend to the retro-peritoneal space, the kidneys, and the liver, and indeed even to the pleura and lungs; and after it has persisted for some time, it frequently gives rise to abscesses of the pelvic cellular tissue. By many authors this turbid-serous infiltration of the connective tissue is regarded as a primary occurrence, and a perivaginal or periuterine phlegmon is then represented to be the essential condition of the puerperal fever. This view I cannot accept, as it does not accord with the results I have obtained from observing cases from the first, since I have constantly seen traces of diphtheria preceding the turbid-serous infiltration. It is true that tumefactions in the vicinity of the cervix uteri may be present soon after birth, from other causes—as, *e.g.*, from contusion and effusion of blood into the connective tissue surrounding the cervix—and such swellings may also issue in abscesses. But we must distinguish these from those which are dependent upon the turbid-serous infiltration consequent on diphtheria, although in many cases the two conditions may be combined.

2. Another mode of spreading the diphtheritic process, which can scarcely be said to be of frequent occurrence, is along the mucous membrane of the internal genital organs to the peritoneum. In the cases of this kind which have fallen under my notice, I have often at the autopsies been able to follow the course of this usually rapid disease. In such cases, in which there was no other visible mode of propagation, the inner surface of the uterus was covered with a bloody-purulent matter, and the tubes (some times only one of these) were reddened, especially along their external third, dilated, and filled with a purulent mass, their fimbriae being unusually swollen and reddened, and covered with or imbedded in fibro-purulent exudations. In these cases, usually a sudden attack of the pain peculiar to peritonitis (sometimes at first confined to one inguinal region) occurred on the second or third day after delivery.

3. The third mode of extension operates through

the vessels, and most frequently through the lymphatics. Many of the dilated lymphatic vessels, and especially those of the uterus, are found filled with masses of white crumbly or fibro-purulent matters. Sometimes, when life has been sufficiently prolonged, there are also circumscribed collections of pus, which it would be erroneous to regard as abscesses. This extension through the lymphatic vessels is usually complicated by the serous infiltration, the so-called phlegmon of the connective tissue; and, almost as a general rule, one or both of the ovaries is infiltrated with serum, and penetrated by dilated lymphatic vessels containing firm white coagula or purulent fluid. In some rare cases the ovary becomes completely loosened in tissue, as if from shredding away. In this form of extension exudation is seldom absent in the cavity of the abdomen, sometimes chiefly occupying the coverings of the genital organs, and sometimes having no defined limits. Finally, in some cases the diphtheria is propagated through the vaginal and uterine veins. This is especially shown in those prolonged cases in which the separation of the diphtheritic deposit from the genitals is followed by thrombosis of the veins, with its consecutive circumstances, such as breaking up, emboli, etc. Peritoneal exudations may also be met with, but not ordinarily. That the phlebo-thrombosis of lying-in women may, however, arise in other ways, quite independently of any diphtheritic process, needs only to be mentioned.

In these various but frequently combined modes of extension of the diphtheritic process of the genital organs, the great glandular organs of the abdomen, the kidneys, liver, and spleen are soon implicated, so that they are usually met with in a state of parenchymatous inflammation; and finally, the lungs, especially at their lower lobes, not infrequently exhibit the turbid-serous infiltration, pleuritic exudations being also associated with the peritoneal. A more infrequent result of the diphtheritic process, because in general a longer duration of the affection is required for its production, is inflammation of the peripheric cellular tissue, which may happen in different parts of the body. This most frequently occurs in and around the joints, around the muscles of the extremities (e.g., in the pernicious form of phlegmasia dolens), or around some of the superficially placed glands, as the breast or parotid.

It is precisely this great multiplicity of local affections, and their combination with each other, that constitute the peculiar characteristic of puerperal fever. As, however, sometimes one and sometimes another of these occupies the foreground, we are furnished with the explanation of why different authors have come to regard these different local affections, whether peritonitis, phlebitis, lymphangioitis, phlegmon, etc., as the essential feature of puerperal fever.

Although, in regard to our knowledge of the etiology of puerperal fever, decided progress has been made in recent times, yet many points remain obscure. Thus, in relation to the admission that the disease is autochthonous—i.e., that it may arise from the spontaneous decomposition of retained portions of the

placenta—we must not overlook the fact, that remains of the placenta or membranes are not infrequently retained for days, weeks, or months within the genitals, without any putrid decomposition taking place, or any symptoms of puerperal fever appearing, while their presence often gives rise to repeated attacks of hæmorrhage. If, then, in numerous other cases the retention of such remains is followed by septic decomposition and puerperal fever, it is evident that some other circumstance has to be sought for which has determined this unfortunate occurrence. From the known influence of the air in exciting putrefaction in fermentable bodies, it results that decomposition of the retained remains of the placenta would be especially expected when these protruded from the os uteri into the vagina, while they would be more protected from the influence of the air when enclosed within the cavity of the uterus. And, in fact, in this last case putrefaction does much more rarely occur; but it must not be overlooked that the remains of the placenta are then more intimately united with the wall of the uterus. However, there are plenty of examples of the occurrence of puerperal fever, notwithstanding complete expulsion of the placenta; and in such cases we must seek for other causes. Numerous cases have proved to me that women who are delivered while the subjects of recent gonorrhœa frequently become affected with puerperal fever, the diphtheritic process being immediately set up, and proving difficult of arrest. I must therefore admit that a preceding inflammatory condition of the mucous membrane of the genital organs stands in a certain relation to the occurrence of the diphtheritis. In the great majority of cases, however, the germ of puerperal fever gains access in other manners; and this is very positively shown by the well-known fact (confirmed by the numerous figures of the Vienna Lying-in Hospital, as also by the results observed in my own clinic, that the so-called street-births (*Gissengeburten*) are scarcely ever followed by puerperal fever. The transport of the diphtheritic germs takes place beyond all doubt very frequently during labor, more rarely after delivery, and sometimes shortly prior to parturition. In what the transported germ consists is less made out. Experience has taught us that cadaveric products and decomposed animal substances place puerperal women in danger, especially when an internal examination is made by fingers that have had to do with dead bodies without having been afterwards cleansed—although Practitioners may also convey the disease who have observed care in washing. The dead bodies in question have not always been those of the subjects of puerperal fever, although these entail a greater degree of danger. Again, certain secretions from suppurating wounds and ulcers conveyed to the genitals of a puerperal woman may give rise to diphtheritis. The epidemic prevalence of puerperal fever in Berlin during the winter of 1870-71 may with strong probability be attributed to the employment of so many of the civil Practitioners in the military Hospitals. Still more decidedly are diphtheritic products—which not infrequently are produced in scarlatina, typhus, cholera, suppurating cancer, etc.—dangerous to lying-in

women. The most usual mode of propagating the diphtheritic poison from the sick to the healthy is its direct conveyance by means of sponges, dirty towels, catheters, elyster-pipes, or the fingers of the accoucheurs; and in this way epidemics of puerperal fever are brought about most frequently in Hospitals; although they are also met with in private practice. What relation this origin bears to an incubation stage is uncertain; for although Veit has observed this to vary between twenty-seven and forty-eight hours, the number of cases adduced are as yet too few to allow of any general statement being made.

Diphtheritis of the genitals is not only met with in puerperal women, although they—on account of the denudation of the mucous membrane of its epithelium, and the numerous lacerations of tissue, as well as the ready decomposition of the lochial secretion—exhibit a special predisposition for contracting the disease, while the dilated vessels present a favorable condition for generalising the affection. Paul Dubois, forty years since, observed that the pupils at the Maternité, who, while menstruating, tended sick puerperal women, also became the subjects of an affection resembling puerperal fever. In Germany similar observations have been published, showing that, under certain favoring circumstances, a similar diseased process may be set up in non-pregnant women. I remember the case of a woman, 52 years of age, who was admitted into the gynecological clinic of the Berlin Charité on account of repeated hæmorrhage. This arose from a large crumblng myoma, for the removal of which I used a forceps which probably had not been properly cleansed after a former employment. The woman died of diphtheritis of the internal genitals fifteen days after the operation. The autopsy disclosed the same lesions as are found in women who have died of puerperal fever—viz., diphtheritic deposit upon the wounded surface whence the tumour had been removed, lymphatic vessels filled with pus, and peritoneal exudation. It would seem to result, from other cases, that this diphtheritic process of the genital organs in non-pregnant women is but rarely followed by dangerous general disease.

Finally, it may also be mentioned that new-born children, and especially those of women who are the subjects of puerperal fever, sometimes are the subjects of a similar diseased condition, which in them proves fatal.

Little need be said concerning the symptoms of a disease well known to you all. The elevation of the temperature is characteristic—this rising, except in the cases in which the diphtheritis is limited locally to the genitals, to an abiding height of 39° or 40° C., or even yet higher. The rapidity of the pulse is also very persistent, frequently remaining much more than 100. The general condition appears usually, at the commencement of the affection, to have undergone but little change; yet in many patients there is soon observed a peculiar death-like aspect, although consciousness is generally retained to the last. In some cases there is delirium, and in some rare instances maniacal paroxysms, the autopsies usually revealing no morbid changes in the brain.

The diphtheritis itself is only visible to the eye within the uterus being discovered by the lochial fluid acquiring a peculiar smell, and by the discharge of diphtheritic masses on the re-issue of injections that have been thrown in. The features of the disease are in different cases essentially modified, according to the extension it has acquired. Very frequently the hypogastrium is painful on pressure in the region of the uterus, and tumefaction is here perceived both on external and internal examination. Such tumefaction, as already stated, may arise in puerperal women from other circumstances; and this is especially the case after laborious labors, effusion of blood having taken place into the cervix uteri or the cellular tissue surrounding the vagina. This hæmatoma may also, as well as the parametritis consequent on diphtheritis, pass into suppuration and give rise to pelvic abscess. The symptoms produced by the frequently ensuing affections of the intestine or bladder—peritonitis, pleuritis, phlegmon—call for no explanation.

With regard to the prognosis of puerperal fever in general, if we except the cases in which the diphtheritis remains localised, it is upon the whole unfavorable; for we must admit that one-third of the cases in which fever has ensued upon diphtheritis of the genitals terminate fatally. Death takes place most frequently up to the fifth day, and then up to the eleventh day. In some cases the disease may last even for months.

I have only a few words to say concerning treatment. The prophylaxis lays claim to our most earnest attention, and the etiology of the disease indicates many important points for the exercise of this. The extremest cleanliness of all having to render service to the lying-in woman, both as regards their persons and their clothes—especially their fingers and sleeves—and cleanliness in regard to all clothing, catheters, sponges, enema-pipes, etc., must be most stringently insisted upon. It is very much to be desired that all the utensils of labor should be new for each woman, and the same elastic catheters should never be employed for several lying-in women. As mere washing the hands which have become contaminated with infectious matter does not seem to afford sufficient security for internal exploration, I think it best under such circumstances to rest satisfied with external exploration. Especially does this rule apply to lying-in Hospitals when cases of diphtheritis have appeared; and my own experience on this point entirely confirms the propriety of the advice given by Halbertsma and Litzmann. How necessary, then, is that complete practice of external exploration which I have taught since I first held the Professor's chair, speaks for itself. Lastly, in regard to the curative treatment, I can only refer to what I have already stated in a detailed communication which I presented to this Society on "The Treatment of Puerperal Inflammations of the Female Sexual Organs." It must be pre-eminently symptomatic, and, as long as the temperature continues high before all things the fever should be diminished. Internally digitalis with nitre or acids, and externally tepid or cold applications, contribute to this end,

after due evacuation of the bowels has been secured. I cannot speak so well of quinine as do many authors. Local treatment has during the last ten years rightly been much tried. Cleansing out the vagina by syringing and injections of tar or creasote-water, with carbolic acid, chlorine, or solution of nitrate of silver, has without doubt proved of great utility, even although it has not often happened that the process has been cut short by their agency. Injecting the same substances, suitably warmed, through a large catheter *à double courant* into the cavity of the uterus has sometimes been followed by a considerable diminution of temperature, as well as cleansing out the uterine cavity; but a decided general improvement has been by no means of such frequent occurrence as might have been hoped.

ECZEMA PALPEBRARUM.

Clinical lecture delivered at St. Mary's Hospital,

By HAYNES WALTON, F.R.C.S.,

Surgeon to the Hospital, and Surgeon in Charge of the Ophthalmic Department.

GENTLEMEN,—This is the most common affection of the eye. It is usually, but incorrectly, called *tinea tarsi* and *ophthalmia tarsi*.

The characteristics are the same as those of eczema of the trunk or of the limbs, a little modified by position, to which are added certain effects arising out of the conformation of the eyelid, the part of the lid in which the affection is most developed.

The whole thickness of the eyelid with its many textures are involved.

The skin is the texture most palpably implicated. It is inflamed, and there are marked changes in its structure, as well as derangement in its functions. Its sensibility is augmented. It is thickened by serous infiltration, and, as a consequence, is oedematous and some times fissured. It exudes at times a serous lymph. Sometimes papules, sometimes vesicles, sometimes pustules, form on it. The commonness of the last entitles the disease to be placed under the pustular form. There is nothing peculiar in this from an ophthalmic point of view, because the pustules prevail in hairy situations. Cuticle, which, thus raised, may be entirely thrown off and replaced by a soft, lardaceous-looking material, which is merely unhealthy cuticle attended by muco-purulent secretion, or by a thick crust formed by the drying of the morbid secretions which are poured out from the skin itself, the Meibomian glands, the cilia follicles, and the conjunctiva—most, or all, of these eruptions may co-exist.

The usual appearance of the disease when we are consulted is that of crusts on the edge of the eyelid by which the cilia are glued together in groups. In children there is usually an overflow of tears, and the cheek is excoriated or roughened.

The subjective symptoms are itching or tingling, but neither of these is well marked in this region, and the patient escapes much torment; or soreness; or stiffness of the eyelid; or a sensation of roughness

in the eyeball, or of grit in the eye, which necessitates the eye being kept partially closed; and nearly always agglutination of the eyelids during sleep.

The usual variation in eczema are met with here. The inflammation, or the pimples, or the pustule, or the exudation, or the infiltration may predominate. This includes mildness or severity of such symptoms. Thus, there may be present but the least redness or swelling, with only a little scurf between the cilia; or most of the eczematous features in the fullest intensity.

The upper eyelid suffers more than the under.

The disease may be partial, affecting only a portion of the edge of the lid, or completely occupy it, and involve besides a considerable portion of the rest of the palpebra.

Both eyelids are usually diseased, and of both the eyes.

Effects of Eczema.—Beneath incrustations which adhere to the cuticle, there is always excoriation from which serum and thin pus exude. The ulceration may be sufficiently deep to destroy much of the skin, and even some of the tarsal cartilage.

The cilia follicles seldom escape damage, from which the cilia grow abortively (and trichiasis is induced) or are lost from suppuration in their follicles.

The fibro-cellular tissue of this situation becomes thickened and dense. This is the chief source of the thickening of the ciliary region, which may be very marked.

The tarsal cartilage becomes thickened and hardened, and contracted from side to side.

The Meibomian glands become altered in function, pour forth a viscid secretion (the chief source of the agglutination of the eyelids), and are ultimately destroyed, and their outlets closed by cicatrization. Some of them may suppurate.

The conjunctiva undergoes the morbid changes usually produced in it by inflammation.

Entropium may ensue.

Slight ectropium is more common. This is associated with damage to the punctum lacrymale, together with displacement of it and loss of the inner and part of the outer edge of the eyelid, with cuticular degeneration of the surface, by which a glazed red margin is left, constituting what is called *lipitudo*.

The whole of the palpebral and most of the ocular conjunctiva may inflame.

Intolerance of light may be produced, irrespective of cilia irritating the eyeball.

Eczema is essentially, in the eyelid, a chronic affection, without any specific course, although there are stages or periods of irregularity of the several morbid phenomena. It may last for years, and even for life, with intermission to the more prominent symptoms, all the while spoiling the eyelid more and more. It generally lessens in severity, and may even cease, when the cilia follicles and the Meibomian glands are destroyed.

Cause of Eczema Palpebrarum.—Struma, or poor nutrition, is so frequently an accompaniment of the eczema, that it must be regarded as the remote or predisposing cause. There is frequency of the disease

among the children of very poor people. In nearly every case there are evidences of an inherited or an acquired scrofulous constitution. There are enlarged lymphatic glands, or a swollen upper lip, or sore ears, or a tumid belly, or derangement of digestion or strumous conjunctivitis, or paleness, with looseness of the skin. There are immediate or exciting causes, such as small-pox, measles, scarlet fever, smoke and filth in bad dwellings, impure air.

General Treatment.—I regard the constitutional remedies as the most essential. If the eczematous diathesis be subdued—that is, if the poor nutrition, or the debility from whatever origin, which is the predisposing cause of the affection be removed—the local manifestation of the disease will soon vanish; yet sooner, if assisted by local measures.

The secret of the cure consists, then, essentially in discovering the nature of the debility—whether it be assimilative, nutritive, or nervous—and subduing it. This includes attention to the disordered function of any internal organ. I have known of several severe examples of the affection which have been completely cured by change of residence—and nothing else—from this to a warmer country.

Local Treatment.—In every instance the cilia should be closely cut. Any of them that are irregular or abortive should be plucked from their follicles. For the eczema itself, the remedy must be shaped according to the condition of the eyelid when the patient is seen, subject to the principles of reducing the inflammation, stimulating to a more healthy action the exuding surface, removing accumulated secretions or crusts, and healing excoriations or ulcerations.

When the inflammation is acute rather than chronic, the use of an evaporating lotion to reduce any unnatural heat is advantageous. When it is chronic, warm applications, as fomentations, are preferable. With the reduction of inflammation, the case is materially better.

When the disease is in an early stage, and the surface-accumulation is scanty and of the lighter form (chiefly from serum), and the inflammation is subdued, or where it is so slight as not to be a prominent symptom, stimulation is called for.

Lotions are not applicable, on account of their liability to irritate the conjunctiva and the cornea. Ointments answer better, and they serve the double purpose of enabling the drug to be definitely and persistently applied, while they prevent the eyelids from adhering. They are demanded of varying strengths, according as irritability or sluggishness of the skin prevails; the stronger being for the latter state. They should be applied twice or thrice daily, with a sable brush, after the part has been cleaned with warm water and Castile soap, and any secretion washed off. The merest smearing of the surface will suffice. After trying various substances, I have settled down to the use of the hydrargyri oxidum rubrum. My weakest formula is one grain of this to a drachm of the unguentum cetacei; my strongest, two grains to the same.

The greater the strength of the ointment, the more sparingly and neatly must it be used, lest it should get within the eyelids and inflame the eye.

Should either seen to irritate, it must be used less strong or less often.

When the disease is of old standing, and the incrustations are dense and adherent, being made up of dried pus, epithelium scales, sebaceous matter, carbon and dust from the atmosphere, beneath which there is sure to be excoriation and ulceration, other treatment is needed. The incrustations must be removed without damaging the eyelid. My plan is to keep them oiled with almond oil for a couple of days, and then to sop them for a long time with hot water and a rag until they are sufficiently softened to be wiped off or picked off; oil the lids, and on the following day wash them and dry them thoroughly, and touch all the excoriated or ulcerated parts with nitrate of silver. For years I used strong solutions of this drug, but now I apply it solid, scraping the stick to a point, and touch the parts lightly and definitely, taking the greatest care not to let any of it enter the eye. I keep a piece of blotting-paper at hand to soak up any moisture which may be about the edge of the lid. Should any of the caustic accidentally enter the eye, in spite of all caution, the eye should be very freely washed at once in a basin of tepid water, to relieve the burning. This plan may require to be repeated. An interval of a week at least should be allowed, during which the eyelids should be washed and oiled twice or thrice daily.

From time to time the cilia should be re-cut, or re-plucked.

Or, again the application of the nitrate of silver is required when there are pustules on the lid, with little or no incrustation.

Any excoriation or roughness of the cheek should be attended to. Eczema palpebrarum will readily yield to the methods which I practise and recommend. Certain damage which may have been inflicted on the cilia follicles is capable of much repair, and tolerably healthy cilia may grow in the place of abortive ones, or of many which have dropped. But many, or all of them, may be destroyed. The Meibomian glands are always more or less destroyed in all prolonged or severe cases of the affection. When treatment is undertaken before the glandular apparatus of the lid suffers, every trace of the disease may be removed.

The injury which the disease inflicts, and which is so apparent, must not be mistaken for the disease itself, or else treatment will be continued when it is unnecessary, and often undertaken when the eczema is cured.

The trichiasis, the entropium, or the ectropium which may be induced demands special treatment, of which I shall not speak to-day. *Medical Times and Gazette.*

FIBROUS DISEASE OF THE UTERUS.

There are cases in which surgical aid is declined, or cannot be recommended, and apart from them the possibility of relief by medical treatment is still a moot point. With the idea of ascertaining what really are the opinions and practice of that branch of the professions under whose notice these case, more

frequently come, the *British Medical Journal* has collected a number of notes, which, if they show that the "therapeutics of the disease are uncertain and tentative," are by no means devoid of interest. From the report, extending over several weeks, we select the salient points:—

The medical treatment of fibrous tumours may be divided into:—The promotion of absorption; the restraint of the growth; the promotion of expulsion; and the restraint of the bleeding, which they cause—says Dr. Braxton Hicks. He confesses that he has never seen anything which could encourage one in the expectation of *absorption*. He has given iodine, bromine, and bichloride of mercury numberless times, without diminution in the size of the tumour. He thinks he has observed *restraint* of growth from the employment of iodides and bromides given over a considerable period. When the effect of these drugs on the testis and ovary is considered, it is not difficult to understand how they tend to lessen the engorgement and activity of the sexual organs. To this treatment should be added the recumbent posture part of each day, and the avoidance of external pressure. Expulsion may be promoted by ergot, given in ten-grain to half-drachm doses twice daily, for two or three days during the monthly epoch. He has seen more than twice an intermenstrual fibroid converted into a polypus and rendered capable of removal. To restrain loss of blood, the recumbent posture, gallic acid, and ergot are most reliable, the former in twenty-grain doses two or three times daily, the latter in ten or eighteen-grain doses two or three times daily. Gallic acid, combined with quinine, cinchona, or other good tonics, during the intervals of bleeding, he has found serviceable. Where much anæmia is present, he has given iron, alum, and gallic acid combined, and changed it during the "period" to ergot, or full doses of gallic acid. The formula is one grain sulphate of iron, ten grains of sulphate of alumina, ten grains of gallic acid, five minims of dilute sulphuric acid, and five minims of chloric ether, in one ounce of peppermint water. Dr. Hicks has not seen much benefit derived in those cases from the employment of *cannabis indica*s.

Dr. Matthews Duncan prescribes iodine and bromine for this affection. They sometimes *appear* to be of use in diminishing the bulk of the fibroids. When hæmorrhage is severe, a solution of per chloride of iron, pharmacopœia strength, may be applied by means of the hollow probe and syringe, to the bleeding surface; this treatment he considers invaluable, and it sometimes even saves life.

The term *fibrous* is objected to by Mr. Spencer Wells as leading to error. They are simply excessive developments of unstriped muscular fibres of the uterus, with connective cellular tissue. They contain little or no fibrous tissue, and from their appearance may not be improperly termed *fibroid*, but not *fibrous*. He is astonished to find doubts expressed as to the fact of the disappearance of these "growths and can only explain these "by the juvenility, or limited experience of the observer" and has seen enough to convince him that medicines have a very considerable influence, provided the remedy be

adapted to the case, for cases diagnosed by Farre, West, Priestley, Oldham, etc., have either disappeared or reduced in size to insignificance. This may not be seen in young women, is rare during active uterine life, but not unfrequent after the cessation of the catamenia. In cases where the tumour is elastic—probably more cellular than fibroid—with fluid infiltrating the cellular interspaces, Mr. Wells considers bichloride of mercury, with bark, is often followed by a remarkable diminution in the size of the growth. Where there is much irregular bleeding he agrees with Dr. McClintock in regarding chloride of calcium as of great value. When bleeding has the character of menorrhagia, he has more confidence in vinea major, (the great periwinkle of our shrubberies)—than in lime, gallic acid, or ergot—as recommended to him by Mr. Squire, he prescribes it as laid down in Squire's version of the pharmacopœia.

Dr. W. R. Rogers is of opinion the medical treatment of fibrous tumours of the uterus must be palliative, but it is true that after the climacteric period has been passed, they occasionally become absorbed. The flow of blood to the uterus is diminished by the cessation of ovarian excitation, the process being aided by the use of iodine and mercury. Anasarca and ascites accompanying fibrous enlargement of the uterus should be treated in the usual way by purgatives, diuretics, stopping hæmorrhage, when not severe, by astringents, sulphuric and gallic acid, acetate of lead, etc. Should these means fail, he plugs the vagina. Bichloride of mercury and decoction of ergot he has found useful in some cases, and the persevering use of chloride of calcium in others. Injection of iodine or solutions of iron (after dilatation of cervix) have often checked hæmorrhage. Free incision of the cervix, as advised by the late Sir J. Simpson, he has found to arrest, for a while, and diminish hæmorrhagic losses.

Omitting all local measures, Dr. Routh speaks of the purely therapeutical treatment of these cases as being very effective. Bromide of potassium, bichloride of mercury, solution of chloride of calcium, compound tincture of ergot, strychnine, compound jalap powder, and purgatives generally, also, electricity, the external application of iodine, and blisters. These remedies, long continued, produce good results. In his treatment, Dr. Routh does not restrict himself to any one plan, but adopts two or three, together with local measures. He has seen a large fibroid, blue from congestion, and causing copious floodings periodically, diminish greatly in volume by the ordinary *mistura alba* purgative, after one week's use. The continuous current of high intensity he believes to be most effective in some cases. It seems to coagulate the fluids in the tumours, and to disturb their situation so that they become absorbed. In the space of one year he has seen a tumour the size of a man's head become small as an orange by this treatment, but wounds are formed by the poles, difficult to heal. Dr. Routh places one pole at the spine, and the other within the vagina and os uteri, and guards with gutta-percha all of it except the extreme ends.

The removal of uterine growths by drugs being, in

the present state of medical science, out of the question, we have to consider, says Dr. Wiltshire, how to relieve hæmorrhage, and also the troubles arising from pressure on the surrounding parts, dysuria, congestion, pain in defæcation, hæmorrhoids, etc. For hæmorrhage he relies upon bromide of potassium and gallic acid, and is rarely disappointed. Opium, perchloride of iron, sulphuric and gallic acids, etc., he gives in other cases. To relieve pain resulting from pressure he uses morphia, hypodermically or by the mouth, opium enemata, chloral, suppositories of belladonna, etc. In dysuria, he administers with excellent results occasionally bicarbonate of potash and henbane and belladonna, and spirit ether nit.

The sooner we abandon the idea of curing or of lessening the size of fibrous tumours of the uterus—that do not admit of surgical relief—by mere drug treatment, administered by mouth, skin, or vagina, Dr. Alfred Meadows considers the better will it be for our patients' health and comfort, and for our professional reputation. To reduce by any system of medication, a fibrous tumour of the uterus he considers hopeless, and he is satisfied that we are not in possession of a drug able to influence the nutritional changes of the uterus, and its morbid companion, so as to check the growth of the latter, or to promote its absorption; yet much good may be accomplished by judicious medical treatment, and, in the main, we aim at either the relief of pain or the arrest of hæmorrhage; as a rule, these are in inverse proportions to each other. He has found that the more sub-peritoneal the tumour is, the greater the pain and the less the hæmorrhage; and the more sub-mucous it is, the greater the hæmorrhage and the less the pain. For the relief of pain he prefers medicated vaginal pessaries carrying a third or half a grain of morphia with a sixth or a twelfth of a grain of atropine. Where there is slight discharge, a few leeches to the cervix uteri will afford relief. To arrest hæmorrhage, few drugs he has found so efficacious as a combination of peracetate of iron and ergot. Nitrate of silver in quarter-grain doses, and acetate of lead with dilute nitric acid came next in efficacy.

Dr. Andrew Inglis, of Aberdeen, has no faith in mercury for fibroids of the uterus given internally or applied externally, nor in bromides nor iodides. He considers ergot to produce mechanical results, either by bringing on absorption or in carrying enucleation and expulsion. He has a case of a large fibroid which, eight or nine months ago, suddenly began to shrink, and has not produced since then any unpleasant symptoms. To stop bleeding, the patient was given for several days large doses of ergot. He has likewise a patient with a small tumour hanging out of the uterus, and under similar treatment it is daily becoming smaller.

In one case a very large mass was considerably reduced in less than a month by electricity applied by means of several rods introduced, says Dr. Muraay, of Newcastle-on-Tyne.—*Abridged from the Doctor.*

CASE OF SUPPURATING BUBOES WITH DIFFERENT PLANS OF TREATMENT.

BY ALFRED S. BOSTOCK, M.R.C.S.

Suppurating buboes being of so common occurrence, I thought the notes of the following case might be interesting to the readers of the *Medical Times and Gazette* :—

A coolie woman was admitted by me into the Colonial Hospital, Trinidad—when I had charge—with a suppurating bubo in each groin.

On May 16, I opened one of the buboes with a curved bistoury, and as I knew by that process buboes were a long time in healing, I determined to try another plan on the other side, therefore, on May 19, I opened the other bubo with a trochar and canula, and by that means evacuated the contents; then I injected a solution of sulphate of zinc, gr. iv. ad. ʒj., and put on pressure with some lint in the form of a pad covered with a bandage. On the following morning there was occasion for an aperient, and the ordinary black draught was administered.

May 21.—I removed the dressing, and found some very thin purulent secretion, which I pressed from the bubo by the aperture made when removing the canula. I then replaced the bandage over a fresh pad of lint. There was no complaint of pain during this treatment.

24th.—The bubo opened with the trochar was quite healed up. The other bubo was looking very healthy.

26th.—On pressing the bubo a thin serous-looking fluid came out at the opening left by the canula.

28th.—The bubo was quite healed. So that this bubo healed in nine days; whereas the bubo which I had laid open with the bistoury was not healed until July 4, taking in all fifty days. *Medical Times and Gazette.*

SUNSTROKE.

The report of an important discussion on this subject, which took place at the Louisville College of Physicians and Surgeons, reaches us very opportunely, and we proceed to give our readers some account of it.

Dr. L. P. Yandell, having passed in review the many experiments that have been made as to the effect of heat on the human body, and stated that health is comprised within the very limits of degrees of Fahrenheit's thermometer, expressed his opinion that sunstroke is produced by heating the body above its natural temperature. It occurs in rooms artificially heated, or rendered oppressive by solar heat and crowding, as well as in the direct rays of the sun. It is a casualty of hot weather. Attacks are more frequent during the hour of the day when the heat is at its maximum and men are engaged in laborious exercise. But the casualties are by no means confined to the day or the hours when men are active. In a French ship at Rio Janeiro one hundred cases were afforded by a crew of six hundred, and most of them occurred at night when the men were breathing a hot suffocating, impure air. Attacks at night are also

common in the crowded barracks of India, a vitiated atmosphere conspiring with heat to bring on the affection by rendering the blood impure, as well as by raising its temperature. Clothing unsuited to the climate and season may be mentioned as another circumstance which favours the occurrence of sunstroke. Whatever retains the heat of the body or impedes the circulation of the blood must act injuriously upon men on the verge of a fatal temperature.

Another circumstance co-operating with heat is the want of acclimatisation. All observers agree that the accident occurs much more frequently with those who are not inured to the climate. The attack may come on suddenly, without warning; or, on the other hand, may afford ample warning. In some cases the first symptom has been a burst of laughter, or the starting up and struggling of the patient to escape from some imaginary danger. Often he falls insensible and unconscious when at work, having given no indication of distress; but more frequently it will be found that he has complained for hours, or it may be for days, of heat and dryness of his skin, embarrassed breathing, and a general sense of uneasiness or distress. The skin in all cases has ceased to perform its function. The surface is not only hot and dry, but rough and scaly. The lungs are oppressed, and exhalation from their surface is diminished. The temperature of the blood thus rises constantly, at the same time that the waste tissues render it impure, and the heat of the surface becomes intense. The treatment of sunstroke must vary with the various morbid conditions. In some cases nothing can be done. The patient is moribund from the beginning, and dies in a few minutes. In cases of syncope, if death is not instantaneous, the treatment is the same as for concussion of the brain. In a majority of cases the douche is the most promising remedy. The patient is to be kept as quiet as possible, and if under the use of the cold water his pulse sinks, the application must be discontinued.

If Dr. Yandell's views be correct it follows, that sunstroke ought to be prevented by taking care that the sources of supply of heat do not exceed the waste. It is accordingly laid down that exercise, which is a heating process, should if possible be moderate; clothing should be of the thinnest materials and loose, cold water should be drunk freely, as affording matter for cutaneous transpiration. It must be seen that the skin is moistened with perspiration. The moment a man at work in the hot sun ceases to sweat he is in danger of sunstroke, and should at once quit work and supply the deficient moisture of his skin with water. This is indispensable to the reduction of the accumulated heat of his body. Water is the resource when the body is subjected to an inordinate temperature. After too long a draught upon the system perspiration fails, and nothing will then avert sunstroke but the timely use of water to the surface. A man may work long in a hot sun, or labour or sleep in a heated room with impunity, provided he keeps his skin and clothing wet with water. Can it be doubted that in all the cases where men have dry, harsh, hot skins for hours together, and with it a sense of oppression and anxiety, the impending danger might be

turned away by these cooling measures? These principles are equally applicable to the management of horses in hot weather.

Dr. D. T. Smith remarked that the statement that very high temperature is necessary to the production of sunstroke is undoubtedly true; but also that this high temperature must be continued a long time, which had not been mentioned. Excessive heat for a short time will not produce it. The nervous exhaustion attending the attacks is shown by the cessation of perspiration and the contraction of the pupils. Some cases supposed to be sunstroke lack this symptom, and are thereby known to be spurious. Among the prodromic symptoms is frequency of micturition. One feature in the cold water treatment is worthy of notice: if the pulse becomes weaker while it is applied, it should not be persevered in.

Dr. Hornor stated that he used to spend the summer in the country in Pennsylvania, where he frequently assisted in the rye-harvest, which is in July, the hottest time of the year. In this all the circumstances seemed to combine which usually produce sunstroke—great heat long continued, obstruction of the air by the tall rye, no shade, but the direct rays of the sun beating down on their heads; and yet they enjoyed perfect immunity from sunstroke, never having a single case among thirty or forty reapers. He attributed this to the fact that at each end of the field, and sometimes in the middle, they had an abundance of water, frequently iced, of which they drank copiously every time they came within reach of it, and also washed their hands and faces. He regarded the free of water, externally and internally, an excellent prophylactic.

Dr. Milhøe stated that he had been stationed for some time on the Colorado River, where the mean temperature in the shade was 105 degrees, but frequently rose to 112, 114, and even 120 degrees. He corroborated Dr. Yandell's statement as to the necessity of loose clothing and the free use of cold water. The soldiers usually wore straw hats, with a hole in the top, and filled the crown with leaves or wet sponge. They wore flannel shirts, in order not to check perspiration. When cut off from water sunstroke was frequent among them. They drank enormous quantities, often two or three gallons a day. Having no springs, they were obliged to use river water, which was very warm. Their method of cooling it was to keep wet blankets around the vessels containing it, by which means they could reduce the temperature of the water to about 80 degrees, which tasted cool to them in their heated atmosphere. They also took the *cup-bath*, which consisted in pouring cupfuls of water over their heads and letting it run down their bodies. In order to sleep comfortably, they would wet the ground and lay mats over it. The evaporation from this kept them cool while sleeping on the mats. By the employment of these means sunstroke was rare among them. He used to regard sunstroke as congestion of the brain, but he had seen cases in which the surface was cold and the pupils contracted. In such cases the stimulating treatment was employed.

CANCIMUM ORIS.

"I have never found any application so useful or so effectual as hydrochloric acid," as a local remedy in cases of cancrum oris, says Mr. McGreevy (*British Medical Journal*). Chlorate of potass and borax is not sufficient to check the severe nature of the gangrenous ulcer in those cases. Nor has Mr. McGreevy found nitrate of silver, nitric acid, nor any other remedy, except hydrochloric acid to be of the least value. Hydrochloric acid he has never found to fail in checking the progress of the disease, and promoting healthy action. The acid is easily applied by means of a feather or small brush, and the pain caused by it is less than we might suppose, and is accounted for by the partial nervous insensibility of the gangrenous spot.

SPOTTED FEVER AND ITS TREATMENT.

That this is a rheumatic affection is made manifest from the following symptoms: twelve hours preceding the attack, when physicians are called, the patient complains of flashes of heat, with slight chilliness, and a sense of "leg weariness," or sharp pains darting through the extremities; he retires, and between the hour of midnight and four in the morning he is aroused from a sleep which has been disturbed by frightful dreams, by a chill which last from twenty minutes to one or two hours, succeeded by great febrile excitement, accompanied with severe lancinating pains within the cranium, extending down the back and in the limbs. The countenance, often flushed, expresses surprise or wildness and terror. The eyes are rolled upward and inward, with half-closed lids, the pupils are of a vibratory character, dilating and contracting at almost every respiration, which peculiarity is maintained until the brain is freed from all of the "materies morbi."

The above enumerated symptoms do not correspond with those attendant upon congestion or inflammation of the brain, but point directly to a neuralgic or rheumatic disorder. There is great restlessness, moaning or uttering plaintive cries. The pulse is soft, slightly increased in frequency, and decidedly irregular, losing one beat in nine or ten. The breathing is irregular, and is not controlled by the action of the heart; the pulse has been as high as 140 and respirations nine, within a minute. This is never present in inflammation of the brain proper, or at least I have never observed it. The speech is thick, and articulation very imperfect. Constipation is present, and obstinate, but much easier affected by purgatives than in cases of inflammation of the brain. The tongue is generally coated with a white granular fur, which changes first to a brown and then to a black, which peels off in flakes or rolls of the thickness of brown paper, after which it is liable to go through the same changes again. The lips and gums are affected in the same manner, with collection of sordes on the teeth. There is general soreness of the whole body—hyperaesthesia—which continues from the commencement of the attack until convalescence is fully established.

Sudden changes in the weather very materially

affect the condition of the patient; after a change from a warm to a cold, damp atmosphere, all the symptoms are worse, and from a cold to a warm period, the symptoms are improved. Not one case has occurred in this place, but what has been preceded from twenty-four to forty-eight hours by a sudden change in the weather. Physicians of good repute in this county have treated cases for two and three weeks for inflammatory rheumatism of the lower extremities, and on their return visit, after a sudden change in the weather, have found their patients laboring under an attack of "cerebro-spinal meningitis" so-called, and have been more firmly convinced than ever that all diseases are very liable to partake of the epidemic influence, not supposing that it was the same thing, only that it had changed its base of operations.

Death may take place in from twelve to seventy-two hours from compression of the brain, which is produced by a thickening of the membranes and a deposition of effused fluid between the pia mater and arachnoid; the usual symptoms indicative of this condition being exhibited by the patients; a thickening of the membranes of the spinal cord would produce paralysis below the compressed portion, which has been noticed in a number of instances. That rheumatism will produce this condition of things, I think there are none who will deny, and as it is plausible and reasonable to suppose from the evidences that I have seen, and from the testimony of other physicians, I am convinced that cerebro-spinal meningitis should be known as cerebro-spinal rheumatosis.

The treatment should be prompt and active during the first three days. When coma is impending topical depletion should be resorted to by cups applied to the temples, back of the neck, and down the spine, followed by hot fomentations, which will afford great relief. The application of ice to the head and spine is positively injurious. The patient should be brought under the influence of calomel as speedily as possible, with free purgation. Dover's powder, with the addition of morphine, if necessary, to relieve the acute pain and procure rest. Quinine in large doses from the commencement should be exhibited and steadily pursued. Diuretics, as acetate of potassa, sweet spirits of nitre, or neutral mixture should be given at intervals. After the relief of the brain symptoms, it should be treated as any ordinary case of subacute rheumatism. I use the following mixtures:

℞ Tinct. prickly ash, tinct. cimicifuga rac,
Tinct. g. guaiacum, aa..... ʒ ij.
Tinct. colchicum rad..... ʒ i.
Acetate of potassa..... ʒ ij.
Syr. simplex,
Spts. vin. gallici..... ʒ ij. M.
Sig.—A dessertspoonful every four hours.
℞ Quin. sulph..... gr. xl.
Tinct. ferri chlor..... ʒ ij.
Sir. simplex,
Aque menth. pip., aa..... ʒ i M.
Sig.—A dessertspoonful three times a day, with
Dover's powders at night if necessary.
I have had under my care thirty-two cases of this

disease; three proved fatal within forty-eight hours—all of the remainder have recovered; the treatment has not been materially different from what has been just stated.—J. MACLAY ARMSTRONG, M.D., of Edwardsville, Ill., in the *Med. and Surg. Reporter*.

ABSTRACT OF A CLINICAL LECTURE ON ERYTHEMATOUS LUPUS.

By ROBERT LIVEING, M.D., PHYSICIAN TO THE
MIDDLESEX HOSPITAL.

GENTLEMEN,—I propose to direct your attention this afternoon to an interesting case of erythematous lupus now in our Hospital; but before doing so I shall take this opportunity of making a few introductory remarks on lupus generally, in order to point out with greater clearness the distinctive characters of the erythematous form.

Lupus may be defined to be a local disease, chiefly attacking the skin, and especially the skin of the face. It consists essentially in an infiltration of the cutis, with a peculiar cell formation, which undergoes degeneration, and leads subsequently to the destruction of the invaded tissue and the production of a permanent cicatrix. Of the exciting causes of lupus we know little or nothing—it is never contagious, and very seldom hereditary, though we may admit that a scrofulous diathesis is a predisposing cause of its development.

There are several modes of classifying or distinguishing the different varieties of this malady. The commonest, simplest, and perhaps the most scientific is to recognise only two classes—(1) Lupus vulgaris and (2) Lupus erythematous. Historically, also, this division is interesting, inasmuch as Lupus vulgaris was accurately described long ago by Willan, while the true nature of Lupus erythematous was first recognised in our own time by Cazenove.

Now, although this division has the merit of simplicity, it is not quite sufficient for descriptive purposes. A disease which assumes such varied forms as Lupus vulgaris requires some further subdivision to aid and give method to our descriptions. Hence we may conveniently adopt the following nomenclature, and classify the different forms of lupus under the following heads:—(1) Lupus tuberculosus; (2) Lupus vulgaris exedens; (3) Lupus vulgaris non-exedens; (4) Lupus syphiliticus; (5) Lupus erythematous.

I am well aware of many defects in this mode of classification; but, on the whole, I believe it to be the most convenient that we can at present adopt. Under one or other of these heads it is quite possible to arrange all the varieties of lupus commonly met with. I must warn you, however, against the mistake of supposing that there is any essential difference between these varieties. They one and all possess in common the distinctive characters of true lupus.

Now let me say a few words in explanation of the names I have adopted.

Tubercular lupus is the *lupus of childhood*, though not strictly confined to the very young. It shows itself in the form of small nodules or tuber-

cles, appearing on the face, about the size of a split pea or larger. These little elevations are elastic, and painless, often of a bluish hue, rather vascular, and with little tendency to spread or ulcerate unless the disease be injudiciously treated. Many of you may remember a little girl who was for some time under my care with this variety of lupus, and who gradually improved under cod-liver oil and mild local treatment. Hebra, I believe, uses the term “tubercular lupus” in a less restricted sense.

Lupus exedens is the *lupus of young adult life*, and is, unfortunately, the most common kind. It has the well-known characteristic feature of ulcerating deeply into the cutaneous and neighbouring tissues, and produces the most frightful disfigurement, while it heals with thick scars, like those of a burn. This form is most common between puberty and 25.

The name lupus non-exedens is a very inappropriate one as applied to any particular variety, and yet it is one that we can hardly entirely dispense with. It is generally used to indicate certain forms of lupus vulgaris which do not tend to produce open sores or ulcerate deeply into the tissues invaded. It may be said to occupy a position intermediate in its anatomical characters between lupus exedens and lupus erythematous.

By syphilitic lupus I do not mean a syphilitic ulceration resembling lupus, but a true lupus which is modified in its characters and appearance by a constitutional syphilitic taint. It is generally, though not always severe, and spreads deeply into the subcutaneous tissues. It is important to distinguish this form of lupus from the more common syphilitic ulceration of the nose, inasmuch as the latter is more rapid in its progress; and far more amenable to treatment. Besides these four principal names that I have used for the purpose of classification, there are many other terms applied to the disease under discussion—terms all more or less useful for the purposes of description, but which, for the sake of perspicuity, I have avoided—such, for example, as “serpiginous,” “hypertrophicus.” Again; we have the impetiginous lupus of Mr. Startin, and the lupus psoriasis of Mr. Hutchinson—the latter a non-exedent form of the disease, which appears in scattered patches about the body, and has a close superficial resemblance to psoriasis. All these and the other forms to which I have referred may be considered as varieties of lupus vulgaris.

In typical erythematous lupus we recognise some very distinctive features, of which the most important are the following:—(1) In the first place it is the *lupus of Middle age*; (2) it is much more common in women than in men; (3) it begins in the sebaceous glands and hair follicles; (4) it spreads slowly, and has little tendency to form open ulcers; (5) it attacks chiefly the papillary layer of the skin, and leaves smooth white scars, which are covered with cuticle, and are neither hard nor puckered.

I will now read you a brief history of the case before us (taken by Mr. Charlesworth);—C. N., aged 54, unmarried, of a consumptive family. When aged about 16 some of the early symptoms of phthisis developed; and she was sent to the Isle of Wight,

where she recovered. Since that time she has enjoyed pretty good general health, with the exception of a severe attack of ague while living in a fen district. There is no history of syphilis, hæmorrhoids, or uterine disorders. The skin disease from which she now suffers began about ten years ago by the formation of a small reddish dry patch on the back of the right hand, of about the size of a florin; subsequently two similar patches formed on the left upper arm, and one on the right thigh; all these patches gave rise to considerable itching. The disease on the head began about six or seven years ago, and at the present time it affects the scalp, forehead, and face; on the latter it is arranged in a symmetrical manner somewhat resembling a butterfly in shape. The lower margins of both orbits, the fore part of the nose, the upper lip and mouth, are free. The skin over the scalp is freely movable, and the eruption in this situation is of a glistening appearance, and has a red base covered with thin white scales; scattered here and there are white, smooth, even scars. Over the forehead are some dry superficial scales. The hair over the part affected is almost destroyed, but nowhere is the sensibility of the skin impaired. The facial eruption, which is the most recent, is of a much brighter colour, with irregular, well-defined margins, studded with small tubercles, some of which are isolated; it seems in a more active condition. The right upper eyelid is healthy, while the skin of the left is affected and a little contracted at the inner side, so as to prevent the eyeball being properly covered by the lid. The whole surface of the eruption is dry, attended with little pain, but is very irritable.

Allow me now to call your attention to the leading features of this case, and the characters by which we arrive at a diagnosis.

Firstly, then, our patient is of the female sex, and I may remind you that erythematous lupus is far more common in women than in men. Mr. Naylor, indeed, estimates the proportion as about eight or ten to one. Again, you will remember that this variety is essentially the *lupus of middle age*; and in accordance with this view we find in the case before us that the age of 40 was attained before the disease made its appearance. It is true that Dr. T. Fox states (at page 206 of his work on "Skin Diseases") that erythematous lupus "mostly attacks children, and especially those of the lower orders." It is, however, more than possible that Dr. Fox would at the present time modify this statement; you must not, therefore, attach too much importance to it. Neumann justly remarks that the disease "is rare under the age of 20."

Last, but not least, we have the history and character of the eruption. It is of about ten years' standing, and began by the formation of a red erythematous patch on the back of the hand, and another, a little later, on the forehead. The former of these has remained almost stationary since its first appearance, and contrasts remarkably with the latter, which has gradually spread with perfect symmetry over the central part of the scalp, producing baldness, and leaving perfectly smooth white scars, which are neither raised, puckered, nor depressed; the skin

retains its elasticity, and the scalp is movable. The disease has spread downwards as well as upward; it has invaded the bridge of the nose, and then spread laterally over both cheeks, always keeping a perfectly symmetrical course, so that the two sides of the face are equally affected, and thus a butterfly-shaped patch is formed, leaving the skin under the eyes, on the forepart of the nose, and around the mouth perfectly healthy.

This gradual and *symmetrical* spreading of the disease is very characteristic of this variety. Again, note especially the well-defined and slightly raised margin of the patch, the colours of which contrast remarkably with the healthy skin around, while here and there a tiny tubercle springs up just beyond it, showing distinctly the direction in which the disease is progressing—namely, at its circumference.

The whole patch has a red base, and is sparingly covered with thin white and dry scales. Nowhere has there been open ulceration except on the right cheek, which shows a few white lines of scars, evidently caused by the healing of small ulcers, the possible result of too vigorous local treatment.

These patches are nearly painless, but are at times attended with severe itching, which has been noticed as a frequent symptom erythematous lupus. The sense of touch, as far as we can determine, remains as perfect as ever. All this is in accordance with our usual experience of the malady. The exceptional feature, however, in this instance, in the large extent of surface involved in the course of ten years. We may, indeed, look upon the case as intermediate between lupus vulgaris non-exedens and lupus erythematous, but approaching more nearly to the latter, though, like the inhabitant of a border-land, partaking of the characters of both races.

We may ask, Is the disease in this instance modified by any syphilitic taint? In reply, I would merely remark that the patient lost her teeth at an early age, and that we have no history of congenital syphilis to assist us in arriving at a positive conclusion on this point.

I will now direct your attention to the morbid anatomy of this disease. The earliest indication of a pathological process going on in the skin is the appearance of a patch of erythema, which is not at first very persistent. After a time we find that the walls of the sebaceous glands of the skin affected become thickened with fibrous tissue and cells, and their ducts plugged with altered sebum of dark-greenish colour, producing a peculiar and characteristic dotted appearance.

Similar changes occur in the hair follicles, and, as a consequence, baldness is produced. The papillæ are also invaded, and are said by Neumann to be immensely enlarged. The new cell-growth does not generally extend into the deeper layers of the corium. As a subsequent change, the sebaceous glands and the pigmentary layer of the skin are entirely destroyed, and we have produced the well-known smooth white scars which are plainly seen on the scalp of our patient. In some very mild cases the scar left is so slight as to be quite imperceptible; these cases are, however, exceptional.

The diagnosis of erythematous lupus, except in its earliest stage, is not generally difficult, though if hastily examined it might be mistaken for a patch of dry scaly eczema or psoriasis, especially if, as sometimes happens, it is thickly covered with white scales. To assist our diagnosis we must bear in mind the appearance of the erythematous patch, with its well-defined margin and red base, the comparatively small extent and slow progress of the disease, the history of the case, the part affected, and, above all, the fact that neither eczema nor psoriasis leave scars or produce the peculiar alterations in the function and structure of the sebaceous glands which are characteristic of erythematous lupus.

Prognosis.—The prognosis is in the case before us, I need hardly say, unfavourable, as the disease is of long standing, and has made great progress.

Treatment.—With regard to the treatment of this most obstinate malady I have little that is satisfactory to tell you. Nevertheless, it is quite certain that under judicious management the progress of many cases is arrested which would otherwise only pass from bad to worse. Our first care must always be not to do harm; for it is a very easy matter, when strong caustics are used, to leave our mark, and produce a severe scar where nature would have left but a smooth and slight one. In addition, we should always bear in mind that erythematosus, in common with most other kinds of lupus, is always influenced unfavourably by exposure.

Of the many remedies that have been recommended, not one can be said to produce with certainty a marked effect on the progress of the disease. Amongst the most useful may be mentioned cod-liver oil, arsenic, and small doses of perchloride of mercury, and perhaps the most generally useful of all—viz., combinations of iodine and bromine salts. Our patient is at the present time taking by Mr. Nunn's advice, the Woodhall bromo-iodine water, from the well-known Lincolnshire spring, which has proved in his hands a successful remedy in more than one case of lupus.

In choosing local applications you must beware of strong caustics. If they are used at all, they should be supplied with great care, and only along the border of the lupus patch. Of milder remedies, blistering is one of the most useful, especially if it is combined with other treatment, such as the use of a weak nitric acid lotion, or the application of some form of tar. Hebra strongly recommends a plan by friction with soft soap, and the occasional use of soft soap plasters. The application of mercurial plasters is, perhaps, more generally useful than any other local remedy. You must, however, be prepared to find that the treatment which succeeds in one case may be unsuccessful in another, and that in many cases you can only hope to palliate or relieve the disease without producing a permanent cure. *Medical Times and Gazette.*

TREATMENT OF SPERMATORRHEA.

Mr. G. G. Gaseoyne gives the following reconsiderations in the *British Medical Journal*:

The occasional introduction of a catheter as large as the urethra will take, is often of the greatest service; it should be passed into the bladder and allowed to remain for five or ten minutes, according to the tolerance of the patient; its mechanical pressure helps to unload the congested capillaries and small vessels of the urethra: its contact deadens and destroys the extreme sensibility of the urethral nerves, and renders them less susceptible to the influence of slight excitants; whilst, by stimulating the muscles, it provokes their contraction, and so renders material assistance in emptying the larger veins. A silver catheter is the best instrument for the purpose, as it exerts firmer pressure than an elastic bougie; and as the urine can be drawn off through it, the patient will not require to micturate for several hours, which is a point of some importance, as the urethra is often very tender, after the passage of an instrument for the first few times. The frequency with which it should be employed depends upon the amount of discomfort its presence occasions; and, if the pain be great, it should not be left in more than a few seconds, lest rigors, swelled testicle, etc., be occasioned. Sometimes the urethra is *extremely* sensitive, and much pain attends the use of the catheter; but this is an additional reason for persisting with it, though a smaller one may be employed at first, so as to cause less pain. I have sometimes found that smearing the catheter with blue or calomel ointment or with half a grain to a grain of nitrate of silver rubbed down in an ounce of lard, to be of use in obstinate cases; but I prefer the blue ointment to anything I have yet tried. Some camphor, extract of opium, belladonna, etc., may be combined with these ointments if thought desirable. Care should be taken that these applications do not reach much beyond the curve of the instrument, and it should be thoroughly well oiled before using it. The oversecretion of mucus is always checked by the use of the catheter, whether armed with ointment or not.

Cold bathing, cold douches, etc., should not be employed on going to bed. The ordinary bath in the morning does good; but cold applications at night should be forbidden, as the reaction which follows them will increase the local circulation, and so cause congestion and erection of the penis, and thus increase the probability of emissions.

Not only must the position assumed in sleep be attended to, but undue warmth in bed avoided, whether by using very soft beds or too large an amount of clothing. The bowels should be carefully regulated to prevent any accumulation within the rectum; and the urine examined from time to time so as to detect an excess of uric acid, the presence of oxalates, etc., which may render its passage irritating to the hyper-sensitive urethra. Over distension of the bladder must at all times be guarded against, and the patient warned to pass urine on waking in the morning lest he doze off again with a full bladder, which is one of the most certain provocations of erection and emissions.

Before commencing to treat this affection constitutionally, it is generally necessary to allay the digestive disturbances which are so common and often so severe by giving such remedies as may be applicable to the condition of the patient, either with or without the more special medicines. By neglecting to do so, we may not only add to the dyspeptic troubles and obtain no benefit from the drugs given, but a valuable medicine may do harm and be brought into disrepute, in consequence of its being administered at a time when the stomach cannot tolerate it.

Internally, I have found astringents of more use in this disorder than tonics; or they may be combined. Gallic acid, the dilute mineral acids, especially the sulphuric, may be given. Tincture of matico will often be of service, and more so, in my experience, than any other plant rich in tannin, as it appears to act upon the genito-urinary tract, rather than upon the bowels, as is often the case with the others.

Ergot is one of the most valuable remedies for this affection, and the liquid extracts of the *Pharmacopœia* is a very efficient and convenient form for giving it; whilst the dilute sulphuric acid can be added, if thought advisable.

When the urethra is very sensitive, and the passage of urine painful, small doses of copaiba are often most comforting; or the other oleoresins may be tried if it disagree; but none of them, in my opinion, is equal in value to copaiba, when it can be borne.

I am not disposed to regard strychnine in these cases with very great favor; when there is much irritability of the nerves I believe it often adds to this; but when this is subsiding it may be of use as a tonic; so may quinine or iron, but in no other way. I have never given the tincture of iron in the enormous doses (from one to three drachms three times daily) recommended by some, and so I cannot speak personally of its value in such large quantity.

Cantharides, phosphorus (except the dilute phosphoric acid), and the so-called aphrodisiaes, do harm by acting as stimulants to the nervous system generally, and therefore to the local nerves. Cantharides also, by its action upon the bladder is, especially when given in large doses, a very injurious drug in these cases. For the same reasons I disapprove of local blistering; while the sore left by the blister acts, moreover, as a source of irritation, and adds to the liability of emissions.

Belladonna, in my hands, has proved to be an uncertain remedy; in some cases it has appeared to do good by allaying irritation, whilst in others there were no beneficial results from it. The dryness of throat, disturbance of vision and diarrhœa, which are often caused by it, constitute an objection to its employment in full doses, and without them its value is very questionable.

Camphor is a most useful drug; three or four grains made up into two pills, with half a grain or a grain of opium and one or two of aloes, have more frequently allayed irritability and prevented emissions, than anything I have yet tried. Opium alone does not succeed as well, and a larger dose is necessary, so that the untoward symptoms sometimes produced by it are more likely to be incurred.

I have tried chloral in a few cases, and with very great advantage: in doses of fifteen or twenty grains at bed-time, it has answered its purpose admirably.

Bromide of potassium, in thirty or forty grain doses, will sometimes be of service; but it seems to me a less certain remedy than chloral, which I am disposed to regard as one of the valuable agents we possess for these cases, though as yet my experience of it is limited.

Suppositories vary much in their action whatever drugs they may contain. Occasionally they answer well, but often they do not lessen, and I am not sure they do not sometimes increase, the irritability of the parts.

Galvanism I have not employed myself; but in the few instances where I have known it tried by others, it has seemed to me to do more harm than good, by adding to the nervous irritation.

Lastly, as to cauterization by the *porte-caustique*, I need scarcely say that I am strongly opposed to this method of treatment; for, if my view of this disorder be correct, this instrument can relieve it in no other way than as the passage of the catheter does. I do not believe that ulceration or other morbid conditions of the ejaculatory ducts are the causes of seminal losses. We have no evidence that these pathological conditions exist except, it may be, in very rare instances; and, if so, the application of nitrate of silver to the prostatic mucous membrane in every case of nocturnal emission must be unnecessary; and in spite of its alleged harmlessness, I consider it to be a dangerous treatment. I have known two persons die from the effects of the *porte-caustique*, and I have seen others suffer severely from its employment. This may not be the usual result; but I do say that the application of nitrate of silver to the urethra, whether in stick or in strong solution, is at least a very sharp remedy, and will often produce violent inflammation, and sometimes lay the foundation of a stricture or of a chronic irritation of the bladder. If, then, caustic be applied on an incorrect surmise as to the condition of, and its effects upon, the prostatic mucous membrane and ejaculatory ducts it is not only an unnecessary, but, in my opinion, an unsafe method of treatment.

EARLY DIAGNOSIS OF TYPHOID.

In an abstract of a clinical lecture at Cambridge, published in the *Lancet*, Dr. P. W. Latham insists on the value of the thermometer, observing that during the first four or five days the general symptoms which may then accompany the disease—viz., the rigor, the languor and feebleness, headache, epistaxis, giddiness, pain in the back and aching of the limbs, the appearance of the tongue, the state of the bowels, the condition of the urine, &c.—may not be very distinct, or any one of these morbid symptoms may be entirely absent. In a considerable number of cases, in fact, it would be impossible to say, without using the thermometer, whether the patient were suffering from typhoid fever or not. But the thermometric course of the disease at this time, unless it supervenes on some other malady, is very regular;

and by taking the temperature at 8 a.m. and 6 p.m. for three days the presence of typhoid fever may be decided. On the other hand, one single observation may, with very great probability, negative the existence of the disease.

The following is the formula (from Wunderlich) of this initial stage:—

	Morning.	Evening.
1st day	98.6° F.	100.4° F.
2nd "	99.4°	101.4°
3rd "	100.4°	102.6°
4th "	101.6°	104°

If, then, a person, previously quite well, feels uneasy, perhaps has a rigor, and in the evening we find his temperature about 100.4° or 101 F., falling the next morning about a degree, rising again in the evening, and approximately following the above course the disease may be diagnosed with tolerable certainty.

On the other hand, the disease is not typhoid fever if (1) on the second, third, or fourth evenings the temperature approximates even to normal (98.6° F.); (2) if during the first two days the temperature rises to 104° F.; (3) if between the fourth and sixth days the evening temperature of a person under middle age does not reach 103°; (4) if the temperature on two of the first three evenings is the same; or (5) if it is the same on the second and third mornings. From the fourth to the tenth day the evening temperatures are tolerably uniform, the highest being most generally on the evenings of the fourth, fifth, or six days, and reaching from 104° to 105.5° F. or even higher. The morning temperatures are from 1° to 2.6° F. lower than the evening ones; on the fifth, sixth and seventh days, the variations between the morning and evening temperatures being less than take place from the sixth or seventh to the ninth or tenth days. During this period (from the fourth to the tenth or twelfth day), if the general symptoms are obscure, an absolute diagnosis may not be readily made, and the disease may be confounded with several others, unless thermometric observations extend over several days.

LAMINARIA TENTS.

Dr. J. C. Nott, of New York (*Am. Jour. of Obstetrics*), presents the following conclusions in regard to the use of laminaria tents:

1st. Where moderate dilatation is required, the laminaria is preferable to the sponge tents.

2d. If placed in warm water, just before introduction, for a few minutes, they become flexible, coated with mucilage, are easily curved to suit the cervical canal, and may be inserted with the utmost facility.

3d. From their smoothness and softness they are removed without force, and produce no abrasion or irritation.

4th. They may be medicated with morphia, iodine, or anything soluble in water, but do not absorb alcoholic solutions or glycerine. After being so charged, they may be dried and kept for use an indefinite time.

5th. They do not become putrid, and therefore poisonous, as do sponge tents, and may therefore be retained twenty-four hours or more with impunity.

6th. The black, ovoid laminaria, from the Bay of Fundy, is much preferable to the other varieties yet brought to our markets, and free from the objections he has seen made to laminaria by some writers.

7th. The laminaria will be found of great benefit in obstructive dysmenhorrea, if introduced a few days before the menstrual period, and also in cases of uterine catarrh connected with contracted cervix; they prepare the way well, too, for all intra-uterine medication. In either case, if softened in hot water before introduction, they rarely produce any pain or irritation.

8th. He thinks it better to insert several small tents than one, as the small ones expand more rapidly than the large ones.

HEART SOUNDS.

The following table of indications of sounds of the heart is taken from "*L'Aide Memoire de Medicine, de Chirurgie et d'Accouchement*, by Dr. Corlieu," published by Baillière et Fils, Paris:—

A PATHOGNOMONIC TABLE OF SOUNDS OF THE HEART (*Bruits de Soufflé*.)

I.—PRE-SYSTOLIC.

Auriculo-ventricular constriction.

II.—SYSTOLIC.

- | | |
|---|--|
| 1. At the base and apex. | Chloro-anæmia. |
| 2. At the base, with propagation in the large arteries. | Lesions of the Aortic valves, with or without constriction. |
| 3. At the apex. | Lesion of the auriculo-ventricular valve, with or without insufficiency. |

III.—DIASTOLIC.

- | | |
|---|------------------------------------|
| 1. At the base. | Aortic insufficiency. |
| 2. At the apex, confounded with the presystolic murmur. | Auriculo-ventricular constriction. |

IV.—TWO BRUITS DE SOUFFLE.

- | | |
|----------------|--|
| 1. At the base | <div> 1st time. Aortic constriction, with
 2nd time. Aortic insufficiency. </div> |
| 2. At the apex | <div> 1st time. Auriculo-ventricular insufficiency with
 2nd time. Auriculo-ventricular constriction. </div> |
1. In auriculo-ventricular constriction the maximum *bruit* is at the apex.
 2. In aortic constriction the maximum is at the base, propagating itself along the aorta and carotids.
 3. In aortic insufficiency the bruit with the second time with maximum at the base.
 4. In anæmia, slight soufflé with the first and second time, always at the base, and sometimes at the apex.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND.
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In presenting to the Profession the first number of the *Canada Medical Record*, we desire to offer a few words of explanation, which, although to some extent of a personal character, are yet not without interest and importance to the Profession at large. In doing so we will be as brief as is possible, and while we will state facts plainly, we can but express our very deep regret, that circumstances compel our doing so. As most of our readers are aware, for the past eight years we have, in conjunction with Dr. Fenwick, conducted the *Canada Medical Journal*, published by Messrs. Dawson Brothers. In 1864, when the *Journal* was started, Dr. Fenwick was connected with McGill College, while we were simply a plain member of the Profession. This position of affairs continued till January, 1871, when we accepted a chair in the New Medical School, which was then formed in Montreal, and which was afterwards accepted by the University of Bishop's College, as their Medical Faculty. At this time Dr. Fenwick explained to the publishers, that our having joined the new School rendered it impossible for him to continue longer associated with us in the editorial management of the *Journal*, and suggested our withdrawal. After some consideration the publishers affirmed that, as the *Canada Medical Journal* was published by them at the joint request of Dr. Fenwick and ourselves, it was impossible for them to request us to retire, but that if Dr. Fenwick found it impossible to continue associated with us in the editorship of the *Journal*, they would either suspend its publication or continue it under entirely new editorial management. In this state we approached the close of the volume in 1871, when, just before the last number of the volume was issued, we were waited upon by Dr. Fenwick, who for the first time informed us of what had been transpiring between himself and the publishers. He, however, expressed his desire, arrived at after much deliberation, that our editorial association should continue, and as we were perfectly willing, we together waited upon the Messrs. Dawson, and informed them of the fact. Thus the eighth volume of the *Canada Medical Journal* was entered upon. During its course no questions of a controversial character were discussed between the editors.

Indeed, owing to circumstances, which it is needless to mention, it was beyond our power to engage actively in its management, and Dr. Fenwick had all but its entire control. As the eighth volume drew to a close, we were informed by the publishers that a lock similar to what existed the previous year was again threatening, when we insisted that it should be settled definitely one way or another, without delay. We were shortly after seen by Dr. Fenwick, who informed us that after much deliberation he had decided not to continue longer associated with us, in conducting the *Journal*, our being connected with the New Medical School being the only reason assignable. We used every argument we could think of to induce him to change his mind, but without avail, and, entirely powerless to prevent it, the publishers determined to suspend the publication of the *Canada Medical Journal*. Under these circumstances, we appealed to a few friends outside of the School with which we are connected for advice. We went to them first because we have invariably felt that those who are the main support of a Medical Journal are they who care least about matters, which to most School men appear of momentous consequence. This being our conviction, ever since we have been connected with Canadian Medical Journalism we have avoided treading upon ground which we felt was dangerous, and till the *Journal* ceased to exist such was the course it followed. This being the case—not only willing, but anxious, to even go out of the way to avoid school questions, our friends saw no good reason for the action of the “Senior Editor of the *Canada Medical Journal*,” and their advice was to start a new medical periodical, which would carry out the principles we have just enunciated, especially as Dr. Fenwick had determined to issue another journal, which, from the course he had taken, they felt must partake at all events, in great measure, of the feelings which must have prompted him to the action we have with much regret and pain just detailed. We next sought the advice of a few of our confrères of the New School, and as it coincided with that already tendered us, we determined at once to launch the *Canada Medical Record* upon the sea of Canadian journalism. It is now before the Profession, to whom we with confidence appeal. We wish it to be distinctly understood that, although connected with a Medical School, we will in the future, as we have in the past, keep that fact as far from our mind as possible, while working for the *Record*, and that our platform pure and simple will be, elevation of the standard of Professional Education, fair play

to the Profession in all public appointments, and opposition to monopolies which unfortunately exist in the Professional as well as in the Mercantile world. We look to the general profession of this rapidly growing and extending Dominion to aid us in the establishment of the *Record*, and, to place it within the reach of all, we have put the subscription at the low rate of two dollars a year. We hope that many at least of those whom it has been our pleasure to reach through the columns of the old *Journal* will still extend to us their patronage, and we promise them a live *Journal*, well up to the times, and thoroughly independent in its character. The shape we have adopted has much to commend it, being that of the most successful Medical Journals both in Europe and the United States. Although only twenty-four pages, the amount of matter it contains is quite equal to a forty-eight page *Journal* of the old *Canada Medical Journal* size.

From our friends we solicit contributions of cases, and indeed any items of medical news. We intend to keep the Canadian Profession informed as to what is going on in the Medical world.

THE CANADIAN MEDICAL ASSOCIATION.

On the 11th of September next, the Canadian Medical Association will assemble in the City of Montreal, for the fifth annual time in Convention, when we trust to see gathered from every part of our now extensive Dominion many at least of those who have the honor and the welfare of our Profession at heart. Although at the time we write no active preparations have been made for the entertainment of those who will so soon be our guests, we know that on this score those who may attend will not leave our fair city without carrying away with them a good opinion of the hospitality of its physicians. But, although we are looking forward to much pleasant social intercourse at the approaching meeting, it is well that we should bear prominently in mind, that a very serious duty awaits the members of the Association, and that upon the action of this meeting, to a very great extent, will depend its future success. Started at Quebec in 1867, with an enthusiasm which surprised even its most enthusiastic supporters, the meetings which followed at Montreal, Toronto, and then Ottawa came fully up to expectation. But last year at Quebec, although the more than princely hospitality of the Medical men of that city in 1867 must have left upon the minds of those who were present the most pleasant recollections, still the attendance was

not what it should have been, nor was the same interest shown by those who were present as was observable in former years. After the organization of the meeting, members seemed to have lost all interest in the proceedings, and the Medical Bill was discussed by a few, while the great body of the Association felt that the proceedings were not only tiresome, but that some of the scenes enacted were not worthy of a Convention composed of members of the Medical Profession. Of the vast importance of the Bill itself, no one who has closely studied the position of our Profession in all the Provinces of the Dominion, will deny. The grand feature of the scheme, the Central Examining Board, would at once give a rank and standing to our Profession, which cannot be attained by any other means. The determined hostility, however, which has beset this measure, first at Ottawa and subsequently at Quebec, caused almost the entire time of the Association to be occupied in its discussion, and, as a consequence, the purely scientific, and, to the great majority of its members, the really interesting part of the proceedings were so curtailed, as practically to render useless such papers as were produced. So strong was the feeling upon this point at Quebec last year that, by consent almost unanimous, it was agreed that for the last time the Medical Bill should be produced at Montreal for discussion, and whatever fate should attend it, henceforth the Canadian Medical Association would devote its energies in a channel more congenial to the tastes of the great majority of those who have with regularity attended every meeting. Such being the decision which was arrived at, we trust that every member will study the details of the Bill, which has been scattered broadcast, we might say, over the country, before coming to Montreal, and be prepared to deal fairly and honestly with the measure, when its discussion is again renewed. If the feeling is that its ideas are too advanced for the age in which we live, let us lock it away in a casket, and in years hence, when it is unlocked and the Bill taken from thence and adopted, as in time we believe it will, our children will wonder that their parents were so foolish as to push from them that which promised so much for their welfare.

Whatever action is intended to be taken upon the Bill will we hope be attended to in the early meetings of the Association, for if members leave Montreal as thoroughly dissatisfied with the work done as they did at Quebec, we fear that it will not be long before we would have to write an epitaph for the Canadian Medical Association. If, on the other hand, time be given for the reading and proper dis-

cussion of the papers, which we are informed are in course of preparation, a new interest will attach to the meetings, and all will feel that the time thus passed has been well and profitably spent.

We would also suggest that members should arrange to pass three days in convention, instead of only two days as formerly.

WILLIAM FRASER, M.D., M.F.P. & S., GLASGOW.

It is with feelings of the deepest regret that we have to announce the death of William Fraser, M.D., of this city, which melancholy event took place somewhat suddenly, on Wednesday morning, the 24th of Ju'y, at five o'clock. It appears that, although almost unknown to his professional brethren, for more than a year past he suffered from enlargement of the prostate gland, with occasional attacks of retention of urine. One of these seems to have occurred on Sunday, the 21st. On the Monday he was far from well, and against the strong remonstrances of his family, he made his professional calls, being out the greater part of the day. Several of his professional friends, who saw him, remarked how ill he looked. On the Tuesday morning he sent for his former pupil, Dr. Craik, who at once took him in charge. In the afternoon symptoms of urinary infiltration set in, and a consultation of the McGill Medical Faculty was called for the evening, by which time the infiltration was extensive. The scrotum was freely incised, and a quantity of ammoniacal urine escaped, and although this gave great apparent relief, by ten o'clock in the evening he became comatose, and, as already said, breathed his last about five o'clock on Wednesday morning.

Dr. Fraser first entered as a medical student at the University of McGill College, in the session of 1834-5. He also attended the following session, and took his M.D. in 1836 from the same University. He was also the possessor of the diploma of the Faculty of Physicians and Surgeons of Glasgow, but when it was obtained we have not been able to gather. In June, 1845, he was appointed Lecturer on Medical Jurisprudence in McGill College, and he continued to hold that chair till the year 1849 or 1850, when he succeeded to the Professorship of Institutes of Medicine, which he continued to fill up to his death with satisfaction to his colleagues and with profit to those whose good fortune it was to pass under his care. As a lecturer, if not brilliant, he was clear and concise, comprehended his subject thoroughly, and was able to convey his information so as to be understood by the junior members of the class. In

this last particular we, think, was his greatest charm as a lecturer. Occupying so long, as he did, the same chair, his lectures contained an immense mass of information, and that too of a valuable and practical character, which he had apparently, year by year, culled from the current literature of the day. Dr. Fraser was also one of the attending physicians of the Montreal General Hospital, being elected to that office on the 11th May, 1847, and continued actively to perform its duties up to the period of his last illness. During the almost forty years he was in practice, he was scarcely ever absent from his post, the only serious holiday he ever took being a European trip of several months in 1870. As a physician he was most favorably known, and enjoyed an extensive and lucrative practice. His juniors in his profession constantly sought his advice in consultation, and all felt that his judgment was thoroughly reliable. His sudden demise leaves a blank, which will be felt in Montreal for many a long day. Dr. Fraser was a native of Perth, Scotland, and had attained his fifty-eighth year.

THE LATE DR. FRASER.

A special meeting of the Medico-Chirurgical Society of Montreal was held on Saturday evening, the 27th July, when a very large number of members were present. The following resolutions were unanimously passed; the mover and seconder of each, in a few remarks, giving expression to the general feelings of the Society to the great loss which it had sustained in the death of Dr. Fraser.

Moved by Dr. Peltier, seconded by Dr. Reddy :

That the members of the Medico-Chirurgical Society deeply regret the loss of their late friend and associate Dr. William Fraser, whose high qualities as a physician and professor had justly endeared him to his colleagues and fellow-citizens, and whose self-sacrifice and devotion to duty shed lustre on our Profession.

Moved by Dr. David, seconded by Dr. Francis W. Campbell :

That this Society desires to place on record the interest in its meetings shown by Dr. Fraser, whose active assistance helped so much to render them interesting and instructive.

Moved by Dr. Thompson, seconded by Dr. Dugdale :

That this Society extends to the family of the deceased their heartfelt sympathy in the great bereavement which has befallen them.

Moved by Dr. Fenwick, seconded by Dr. Godfrey :

That a copy of the above resolutions be published in the Medical Journals and city papers.

PERSONAL.

We notice that Dr. E. F. Slack, son of the respected Rural Deal of Bedford, has returned to Canada, after spending several years in the old country, studying his profession. He was twice elected House Surgeon of Charing-Cross Hospital, as a reward for his assiduity. This, we understand, is the first time that such an event ever occurred in that Institution.

Dr. Muir, C.B., who some few years ago was head of the Army Medical Department in Canada, has just returned to England from service in India. The *Lawet* says he is to assume the duties of head of the Sanitary branch of the Army Medical Department. Dr. Muir's many friends in Canada will hear with pleasure of his promotion.

Dr. George Ross resigned the House Surgeoncy of the Montreal General Hospital last March, and his resignation took effect on the 1st of May. The Board of Governors of the Hospital passed most complimentary resolutions, regretting his departure. Every word was well deserved, for a more conscientious and painstaking House Surgeon the Montreal General Hospital never had, and it has had many good ones. Dr. Ross has commenced private practice in Montreal, and has our warmest wishes for his success. Dr. Roddick, Assistant House Surgeon, has been appointed to the vacancy. Dr. Clarence Chipman has been appointed Assistant House Surgeon.

Dr. Wolfred Nelson, a graduate of McGill and of Bishop's College, went to Europe some weeks ago, as Surgeon of the *Emperor*. Dr. Maurice H. Buck, an old McGill graduate, has just returned from *London*, by the Steamship *Medway*. He was in poor health but is better, and talks of settling in Montreal.

Dr. Trenholme, professor of Midwifery of Bishop's College, has been in London since the middle of May. He returns in time to resume his professional duties.

Dr. Lucas, Gold Medalist of McGill College, is in London.

Dr. McLaren and Dr. Morrison graduates of McGill College of last spring, have commenced practice, the former in Ormstown, Q., and the latter in Huntingdon.

Dr. Latour, graduate of Bishop's College, has commenced practice in Biddeford, Maine, and Dr. Lanouette of the same school in Ceriloy.

Dr. J. Baker Brown, the celebrated gynæcologist, has become paralysed, and is in great pecuniary distress. A fund is being collected for him in London, of which Dr. Forbes Winslow is the Treasurer.

ANNUAL CONVOCATION OF VICTORIA COLLEGE, COBOURG.

The Annual Convocation of Victoria College was held in Victoria Hall, Cobourg, on the 28th of May. There was a large gathering of the friends of the Institution from all parts of the Provinces of Ontario and Quebec, quite a number of the old graduates being present to show their continued interest in their *Alma Mater*. The immense hall was crowded with a brilliant audience.

There were conferred twenty-five degrees in Arts, four in Law, and forty-four in Medicine.

President Nelles, in an eloquent speech, expressed his strong confidence in the growing usefulness and future prosperity of the College. The attendance of students during the year had been large, and the present graduating class would reflect credit upon any University. They had, in proof of their affection for their *Alma Mater*, established, in perpetuity, a scholarship of \$72 for the first in English Literature and Modern Languages. The Toronto Branch Medical Faculty had established a Gold and Silver Medal, and the school was in a promising condition, although they had suffered a severe loss in the death of Dr. Rolph, who, as a Professor and Lecturer, had achieved a reputation wide as the continent. The new buildings in process of erection would greatly help the school, as they were in proximity to the Toronto Hospital. The Montreal Branch was in a flourishing state.

We have lately received an American paper containing an account of the cross-examination of Dr. E. Warren in the trial of Mrs. Wharton, who was accused of poisoning General Ketchum. The Doctor supported the theory of the defence, which was that the General had died from cerebro-spinal meningitis. The following sharp retort was made by Dr. Warren in his cross-examination by Attorney-General Sylvester :—

"Attorney-General: A doctor ought to be able to give an opinion of a disease without making mistakes.

"Dr. Warren: They are as capable as a lawyer.

"Attorney-General: Doctor's mistakes are buried six feet under the ground. A lawyer's are not.

"Dr. Warren: But they are sometimes hung as many feet above ground."

TO PROCURE A DAILY STOOL.

A correspondent of the Philadelphia Medical Reporter recommends the following novel procedure

"At a regular hour every day, all things being in readiness, tap gently and repeatedly on the anus with a bit of wood or any substance hard enough to produce irritation, and the sphincter will almost certainly relax after a while."

The Chicago Microscopical Society recently held a public meeting at which there was an attendance of fifteen hundred persons. One hundred instruments were exhibited, valued in the aggregate at \$30,000 dollars. There were in the hall twenty-two tables where the owners of the instruments stood ready to exhibit their preparations.

Medical Items and News.

NITRATE OF SILVER IN BED SORES.

Betz regards nitrate of silver as the best remedy for bed-sores. Instead of making use, however, of lint dipped in the solution of lunar caustic, he prescribes an ointment composed of five decigrammes of the nitrate of silver, fifteen grammes of lard, and thirty of wax, which he spreads on linen, and applies to the sores, taking care that the piece is rather larger than the sore. This is repeated morning and evening.—*The Doctor*.

BLOOD-LETTING.

Dr. Byrd, Professor of Obstetrics in Washington University, once more raises the banner of bleeding, and says the practice is more satisfactory than any other. Indeed, he asserts in the *Medical and Surgical Reporter*, that in all inflammatory diseases it is the most scientific and efficient agent, and that the necessity for it is as great at the present time as ever it was in the past.

In certain conditions of the brain found in most cerebral diseases it is, we think, not only indispensable, but the only remedy necessary.—*The Doctor*.

REMEDY FOR PAINFUL WOUNDS.

Take a pan or shovel with burning coals, and sprinkle upon them common brown sugar, and hold the wounded part in the smoke. In a few minutes the pain will be allayed and recovery proceeds rapidly.

CASTOR-OIL MADE PALATABLE.

The *Boston Medical Journal* says that castor oil may be rendered as "sweet as honey" to take by combining it with an equal amount of glycerine, in which a few drops of oil of cinnamon has been rubbed up.

THE BATH IN SMALL-POX.

DR. STOKES, Regius Professor, of Dublin, says:—"We cannot doubt that the mortality in small-pox hospitals would be greatly diminished by the use of the bath. After describing a very severe case of confluent small-pox in which the patient was kept alive only by stimulants, he says the trial of the

warm bath was suggested to him by Mr. Smyly. The effect was instantaneous and marvellous. The delirium ceased as if by magic. It was the delirium of pain; and the patient exclaimed, 'Thank God! thank God! I am in heaven! I am in heaven! Why didn't you do this before?' The fever immediately and completely disappeared, so that, on entering the ward, no one could suppose that there was a case of small-pox in it. He was kept at least seven hours in the bath."

LOCAL APPLICATION OF HYDRATE OF CHLORAL.

Dr. Strother states that thus employed it is of excellent service in "neuralgia, pleurodynia, rheumatism, gastralgia, nausea, and vomiting." A saturated aqueous solution is applied over the seat of pain with slight friction, and glycerine, olive oil, or cream is used as a subsequent dressing. There will in most instances be enough of the chloral absorbed to produce a considerable anodyne effect, in addition to its rubefacient action.—*Boston Medical Journal*.

A VACCINATION MARTYR.

"EXAMPLE is better than precept." Acting upon this wholesome maxim, a Medical Practitioner stated during the progress of a case in the Court of Queen's Bench the other day, that he had been vaccinated 477 times. It was his practice to vaccinate himself when parents objected, to prove that there was no harm in it.

WASH FOR CHILBLAINS.—Sulphurous acid, three parts; glycerine, one part; and water, one part. The acid will be found particularly useful in the irritating stage of chilblains.—*Cincinnati Medical Repository*.

CHRONIC DIARRHŒA.—Dr. E. L. Shurley, of Manistee, Michigan, has had good success in the use of the compound solution of iodine (Lugol's.) He gives five drops in half a tumblerful of water four times daily.—*Buffalo Med. and Surg. Jour.*

The external application of iodine, applied with sweet oil, has seemed to have a marked effect in many cases of chronic diarrhœa that had for a long time resisted internal treatment.

A case of fracture of the clavicle from muscular exertion is reported in the *Pacific Medical and Surgical Journal*. The man was attempting to raise himself up by his hands.

MARRIED.

In Montreal, the 18th July, at the residence of the bride's uncle, Alexander Hart, Berthelet street, by the Rev. Charles Chapman, M.A., Thomas A. Rodger, Esq., M.D., C.M., to Grace, daughter of the late Charles Dow, Esq., of Grangemouth, Scotland.

DIED.

FRASER.—On Wednesday morning, the 24th July, William Fraser, M.D., Professor of Institutes of Medicine, McGill University, aged 58 years.

BLANCHET.—At Quebec, on Sunday, 21st inst., Jean Baptiste Blanchet, M.D., aged 32 years.

Original Communications.

The Therapeutic Value of Alcohol.—By W. E. BESSEY, M.D.

The precise value of *Alcohol* as a therapeutic agent, and the particular circumstances under which it is indicated, or contra-indicated, in the treatment of disease, are questions of the utmost moment, not only to the conscientious medical practitioner but also, and more especially, to the public, who are to derive the benefit of a correct solution of this medical problem, or suffer the consequences which must inevitably flow from an adherence to erroneous opinions upon the subject.

The profession seems to be particularly liable to a periodicity of change in opinion upon important matters relating to the treatment of disease; and these changes seem to be of a contagious nature, and to become epidemic. Thus has it been in the past, and we have witnessed an epidemic of blood-letting in which each aspirant for medical fame seemed to be metamorphosed into a veritable Sandrago. So, from Cullen, a crop of leeches followed, who were only startled from their delusion when Count Cavour paid the penalty of a fanatical adherence to *routine*, by the sacrifice of his life to professional prejudice.

The age or epidemic of *Mercurialization* followed that of blood-letting, and is only being abandoned by degrees, and, as by necessity, before the pressure of a more thoughtful and considerate phase of medical opinion.

The age or epidemic of *Alcoholization*, or Alcoholic Medication, is still active here as in many other portions of the world; while in many of its former strongholds it is paling before the moral force of an enlightened public observation and opinion, and, having reached its acme, it is rapidly on the wane.

During the last ten years this delusion of the medical profession, and fraud upon true medical science, has received many a telling thrust, and it is quite probable that its deathblow may follow ere long; for, as the common proverb has it, "all evils cure themselves," which this promises, through its own inconsistencies and deceptions, speedily to do. But there are many in the profession who, while anxious to confine this drug, like its sister opium, to its legitimate limits, yet consider it to be possessed of some value as a therapeutic agent, and indispensable in the treatment of certain diseases and under peculiar circumstances. This view is that expressed in a recent manifesto published in London, England, and signed by two

hundred and sixty of the leading members of the profession in England.

For some years past, at one time and another, eminent members of the profession in various countries have raised their voices against the merits of this article.

Among these may be instanced Professors Lehman, Lallemand, Perrin, and Duroy, of Paris; Dr. Edward Smith, F.R.S., Dr. Markham, Dr. King Chambers, Dr. W. Carpenter, Dr. Sidney Ringer, Dr. Wilks, Sir A. Carlisle, and others, of England; Professor Gardner, Dr. Russell, and Dr. Lyon Playfair, Dr. Balfour and others, of Scotland; and many more, to whom I shall have occasion to refer in the course of this paper.

The remarkable document published in London in December last, has attached to it the names of sixteen Physicians in Ordinary to the Royal Houses, the President of the Royal College of Physicians, that of the President of the Royal College of Surgeons, the President of the General Council of Medical Education, and an array of names which are household words in the profession as authorities in medical science, in fact the flower of the profession in England. And if these men deem it necessary to promulgate such a document and to give it as their opinion that "while unable to abandon the use of alcohol in certain cases of disease, they are yet of opinion that no medical practitioner should prescribe it without a sense of grave responsibility;" and, further, "they believe that alcohol, in whatever form, should be prescribed with as much care as any powerful drug, and that the directions for its use should be so framed as not to be interpreted as a sanction for excess or necessarily for the continuance of its use when the occasion is past. That they are also of opinion that many people *immensely exaggerate the value of alcohol as an article of diet*, and since no class of men *see so much of its ill effects*, and possess such power to restrain its abuse as members of their own profession, they hold that every medical practitioner is bound to exert his utmost influence to inculcate habits of *great moderation* in the use of alcoholic liquids."

When such men as Burrows, Busk, Watson, Paget, Holland, Ferguson, Quain, Cooper, Sieveking, Pollock, Chambers, Ackland, Farre, Spencer Wells, Balfour, Maclean, Parkes, Aitken, Bird, Druett, Sir Duncan Gibb, Tilbury Fox, Bence Jones, Marshall, Playfair, Rees, Radcliffe, Reynolds, Richardson, Wilks and Budd, make such statements, I think I need have little hesitation in broaching this most delicate of all other delicate subjects to the pro

fession at present, and to inquire what are the circumstances under which alcohol should be used, and what the disease or particular forms of disease in which it is held to be indispensable.

In order that the line of argument which I intend to adopt may appear the more plain and simple, I will first direct attention to the effects of alcohol upon the system in a state of health; after which, knowing the abnormal changes which occur in the healthy tissues under the action of various forms of disease, it will be easy to infer whether or not alcohol is an agent calculated to increase or diminish the diseased action in the part, and at once to establish with the greatest facility whether alcohol is contra-indicated or indicated under any given circumstances.

Its action upon the healthy organism.

Alcohol, in whatever form, either as brandy, gin, whiskey, rum, &c., or largely diluted as in beer, wine, &c., when taken into the human system by imbibition, acts primarily upon the mucous membrane of the mouth, fauces, stomach and alimentary canal, producing a state of irritation equal in degree to the quantity of alcohol taken, or strength of the liquor imbibed, producing congestion of the mucous membrane, followed by feverishness, thirst, drouth, indigestion, and frequently diarrhoea.

Dr. Aitken says, in his *Practice of Medicine* (5th ed.) "when spiritous liquors are taken into the stomach they tend to coagulate, in the first instance, all albuminous articles of food or fluid with which they come in contact; as *an irritant*, they stimulate the glandular secretions of the mucous membrane, and ultimately lead to permanent congestion of the vessels and to thickening of the gastric tissues. In these effects it is impossible not to recognise the operation of an agent most pernicious in its ultimate results. The coagulation is very different from that effected by the gastric fluid, and tends to render the article more difficult of solution by the gastric juice."

It should be noted that irritation is followed by congestion, as that is also followed by either thickening or softening, and frequently the formation of gastric ulcers. That the albuminous articles of diet and all albuminous fluids are coagulated, hence the gastric juice, being one by virtue of the pepsine present, is rendered unfit to promote digestion; the substances to be digested become less easy of digestion and the gastric juice less capable to digest it, and so indigestion or dyspepsia is brought about.

Dr. W. B. Carpenter and Dr. Beaumont have given us their opinions upon this point, and they are worthy of notice.

According to Dr. Carpenter, "the very vascular mucous membrane of the stomach becomes irritated by the direct contact of alcoholic liquors, and this varies with the *amount, concentration and duration* of the application of the irritant. The lining of the stomach is first congested or reddened, it then becomes thickened or swollen, and sometimes softened and ulcerated, while in other cases it is pale, corrugated or wrinkled and indurated. In either case its fitness to perform its allotted duty in the animal economy is very sensibly impaired."

Fortunately we have direct and positive evidence of the effect of alcoholics upon this most important organ secured by the experiments of Dr. Beaumont upon the man St. Martin.

Dr. Beaumont found, the stomach, on examination after he had been drinking freely, in a decidedly unhealthy condition. There was present, in some points, patches of erythema, or redness; in others apthous or ulcerating patches were discovered. Two days later the secretions were vitiated also; the inner coats of the stomach unusually morbid; the erythematous appearance more extensive, and spots more hard than usual, from the surface of which exuded small drops of grumous blood; the apthous patches larger and more numerous; the mucous covering thicker than common, and the secretions much more vitiated. The gastric fluids extracted on this occasion were mixed with a large proportion of thick ropy mucous, and considerable muco-purulent matter, slightly tinged with blood, resembling the discharge from the bowels in some cases of chronic dysentery." This disorder was not indicated by any outward symptom. For, Dr. Beaumont remarks, "St. Martin complains of no symptom indicating any general derangement of the system, except an uneasy sensation and a tenderness at pit of stomach, and some vertigo, with dimness and yellowness of vision on stooping down and rising again; has a thin, yellowish brown coat on his tongue and his countenance rather sallow; pulse uniform and regular; appetite good; rests quietly, and sleeps as well as usual." (By the 6th August the inner surface of the stomach had recovered its healthy appearance—the patient having in the meantime entirely abstained from all alcoholic liquors and having been confined to low diet.) Dr. Beaumont further states that, "diseased appearances similar to those mentioned above have frequently presented themselves in the course of my experience and observations." The free use of ardent spirits, wine, beer, or any intoxicating liquors, when continued for some days has invariably produced these morbid changes; and, as might have been anticipated, habitual excess converts this state of transient

disorder, (removable by abstinence alone,) into a more serious and permanent disorder termed *inflammatory gastric dyspepsia* by some authors; the late Dr. Todd of London thus describes it:—

“Painful digestion, sense of heat, tenderness, or pain at the epigastrium, increased upon taking food or on pressure; thirst; tongue more or less of a bright red colour, sometimes brownish red, sometimes dry, glossy, and adhesive; taste saltish or alkaline, occasionally like that of blood; bowels generally confined, urine high-coloured; skin dry, with occasionally profuse partial sweats, chiefly in the direction of the extensor muscles; temperature of the trunk increased, of the extremities diminished except occasionally in the palms of the hands and soles of the feet, which, especially at night, are frequently hot, dry, and burning; aggravation of the symptoms under the use of stimulants or of irritating ingesta.”

Other observers also corroborate the observations of Drs. Carpenter and Beaumont.

Dr. Sewell, of Columbia College, has examined the stomachs of 300 drunkards after death, and found “in every case the lining membrane *highly inflamed*, the *blood vessels engorged*, the *internal coatings frequently thickened and indurated*, and often with *corroding ulcers*, cancers or scirrhus-extensively developed.”

The fact is that physicians, instead of promoting or assisting the digestion of the patient, for whom they order the “glass of ale for dinner,” seriously impair it. For it is now proven (not upon the ipse dixit of one man, but) on the testimony of our most eminent authorities, that *it neutralises the action of the salivary, gastric, and pancreatic fluids, and produces chronic indigestion and disease*. It may prolong digestion from two to forty-eight hours, according to Dr. Munroe, of Hull. Dr. Ogston's observations from post-mortem inspections were as follows: (1) the *nervous centres* present the greatest amount of morbid change, the morbid appearances being present in over 92 per cent. (this supports the observations of Leoveille, Craigie, Carpenter and Aitken). The changes in respiratory organs succeed in frequency those of the nervous centres, yielding a per cent. of 63.24 of those examined. *Morbid changes in the liver* are next in order of frequency, and are due to *engorgement, granular degeneration, the nutmeg-like congestion*, and lastly the *fatty state*: next are those of the *kidneys*, and, lastly, morbid changes of the *alimentary canal*.”

On this subject of the pathology of drunkenness, Dr. Sewell of Columbia College, U. S., says:

“*Dyspepsia, Jaundice, Emaciation, Corpulence,*

Dropsy, Ulcers, Rheumatism, Gout, Tremors, Palpitation, Hysteria, Epilepsy, Palsy, Lethargy, Apoplexy, Melancholy, Madness, Delirium-Tremens, and premature old age, compose but a small part of the catalogue of diseases produced by ardent spirits. Indeed, there is scarcely a morbid affection to which the human body is liable, that has not, in one way or another, been produced by it; there is not a disease but it has aggravated; nor a predisposition to disease which it has not called into action.”

Dr. Aitken thus refers to its action on the brain, blood and kidneys:—

“The prolonged action of the alcoholic poison upon the cranial contents is to produce *induration* of the cerebral and cerebellar substances, in by far the largest number of cases, coincident with an increased amount of subarachnoid serum; while the steatomatous degeneration of the small arteries leads to *atrophy* of the convolutions and *œdema* of the brain.” Its primary action is to produce congestion of the meningeal coverings of the nerve centres. Further, (Dr. Aitken observes,) “by the veins and absorbents of the stomach, the alcohol mixes with the blood, and immediately acts as a stimulant to all the viscera with which it comes in contact.”..... Alcohol being absorbed, a double series of morbid results ensue. On the one hand, a train of phenomena are induced, partly of a chemical nature and partly physiological or vital. *The general nutrition of the body suffers*, and a bad state of health is at last induced, of a peculiar kind, known as the *drunkard's dyscrasia*. This state of the system is characterized by *positive irritation*, which very soon succeeds to the intemperate use of alcohol, and which is manifested in a variety of ways, sometimes by an unnaturally voracious appetite, but over indulgence is followed by a total disrelish for food—they become unable to eat, and dyspeptic symptoms of various kinds betray the irritable state of the alimentary canal, as stomach-ache, generation of gases, water-brash, heartburn, squeamishness, vomiting, and palpitations of the heart, intestines constipated with deficient expulsive power, sometimes ascribed to deficient secretion of bile, which is deficient in quantity and of deteriorated quality.”

“In the vascular and pulmonary circulations, the presence of alcohol *retards* the motion of the blood, while it produces a temporary increase in the action of the heart and a *congestion of the whole system of the pulmonary capillary vessels*; respiration is quickened, and various symptoms of accumulation of blood within the chest and pulmonary congestion, especially, are apt to occur.”—Dr. Craigie remarks

that "all the spirit drinkers whom he has ever seen or known have been either subject to chronic cough or dyspnea, or have labored under chronic dry bronchial disorder, with asthma." It has been shown by Rodier and Becquerel that fat increases in the blood in most acute diseases, when the biliary secretion is retarded, and when a scanty amount of food is taken. Now we have these very conditions present under the influence of alcohol. Under their use (says Dr. Aitken) "we have a morbid condition induced which is highly favorable to the accumulation of fat in the blood, and such an accumulation has been proved to take place."

The presence of fat globules in the blood is a physiological condition met with during digestion, and after eating substances rich in fat, but the extreme degrees of this is met with especially in drunkards (Vogel, Buchanan, Frank) this latter authority is quoted by Vogel himself to show that the white and fatty blood has its origin in the abuse of alcoholic drinks. Dr. Adams of Calcutta, Dr. Serule of Strasbourg, and Dr. Rayer mention cases in which globules of oil was found floating in the serum of the blood, and in the urine after death.

Dr. Aitkin remarks truly: "it is shown by abundant testimony that the blood becomes surcharged with unchanged and unused material, and contains at least 30 per cent. more of carbon than in the normal state."

Dr. Parkes gives the order of events by which this state of things is brought about, as follows:—"Alcohol is directly absorbed by the blood vessels, without undergoing any change or decomposition, Part of it is eliminated very slowly, *as alcohol*, by the lungs, by the liver, and by the kidneys; but it appears to tarry in largest amount in the liver and in the brain."

Drs. Becker and Hammond are quoted by Dr. Parkes to show that another portion is decomposed: "its hydrogen enters into combination with oxygen to form water, which, with acetic acid produced, is further changed into carbonic acid and water. *Oxygen is thus diverted from its proper function*, the exhalation of carbonic acid in the lungs is diminished, both absolutely and relatively and less urea is excreted by the kidneys than consistent with health."

"The pulmonary aqueous vapour is not lessened but the water of the urine is diminished, the chlorine greatly lessened, as also the acids and bases."

Dr. Aitkin continues: "All the evidence points to the effect of alcohol, as causing the retention of substances which ought to be eliminated; and this

retention of effete matter is still more intensified by the stimulant action of alcohol increasing for a limited time the frequency of functional acts, followed as it is by a corresponding depression. In this way impaired health is soon brought about, tending to wasting of the tissue generally; and, so long as any alcohol remains in the blood, *as alcohol*, a certain toxic or poisonous effect continues to be produced upon the nervous system through which the poisoned blood circulates."

"If a constant supply of the alcohol is kept up, the phenomena of *alcoholism* becomes chronic or persistent, and acute paroxysms supervene."

"In other instances the degeneration of several vital organs generally, may become so excessive that death follows by asthenia, or with typhoid phenomena, ending in coma."

Another writer says:

"The circulatory system is seriously affected; the arteries being often abnormally contracted, and the veins greatly and irregularly enlarged. Organic disease of the heart, especially ossification and fatty degeneration, is frequently induced. The blood is much darker, less coagulable, and more venous in character than in temperate persons. Consequently, digestion, assimilation, absorption, excretion, and indeed all the bodily functions, depending as they do on a healthy circulation, are imperfectly performed.

The respiration gives signal indications of this loathsome habit. The breath is generally impregnated with alcohol, and is frequently attended with a disgusting fetor. Well authenticated cases are on record of spontaneous combustion, resulting from the ignition of this alcoholic gas. The lung substance itself frequently becomes tuberculous, and consumption is induced."

Dr. Ainslie considers it to be "a true narcotic poison," and classes it with the so called anæsthetics, chloroform and sulphuric ether. As such, he accounts for its action in producing paralysis both sensory and motor, by its efficacy in producing a "suspension of nervous activity," and rendering the nerves "incapable of transmitting impressions," and this "increased by other sources of deficient vital power, he considers a sufficient explanation of the nervous debility, which brings about the delirious crisis," as evidenced in maniacal excitement, terrifying hallucinations, and delirium tremens. He also attributes to it the power to produce a series of morbid phenomena which he treats of under the general name *alcoholism* (so called from the cause by which they are induced,) which he considers are "due to the direct action upon the nervous system of a

blood supply, charged with a high percentage of alcohol," (and deficient in oxygen) rendering the nerve substance unsuitable to the due performance of its functions. The insufficient supply of oxygen being "consequent upon a morbid condition of the blood corpuscles owing to the deleterious action of alcohol." He also agrees with Dr. Ware of Boston, that *delirium tremens* is not due to the removal of the accustomed stimulus, as some assert, but rather to its continued excess. The following are among the diseased conditions which he ascribes to this cause, viz: foul breath; dyspepsia; irritability and painful conditions of stomach and alimentary canal; impaired nutrition. Omitting diarrhoea and dysentery he mentions profuse hemorrhage from the bowels; cirrhosis of liver; (excessive production of sugar, favouring diabetes) granular and fatty degeneration; gout; rheumatism; neuralgia; sensory paralysis; numbness in lower extremities; (a symptom of grave import as indicative of the early succession of series lesion of the brain,) muscular tremors; paralysis agitans; general intellectual enfeeblement; and moral degradation, (marked by cowardice and untruthfulness); dementia; mental delusion; hypochondriasis; insanity, (with suicidal tendency); apoplexy; epilepsy; *acne* on skin of face; nervous debility with feverishness, exalted pulse, 100 to 140,—resembling pulse typhoid state, also a general want of tone in the muscular system.

For pathology of drunkenness see p. 84, 85, article on Alcoholism, Reynold's System of Med. 1868.

As regards its *strengthening* properties Dr. Brinton of London (1861) settles this point in the following terms:—"Careful observation leaves little doubt that a moderate dose of beer or wine, would, in most cases, at once diminish the maximum weight which a healthy person could lift; mental acuteness, accuracy of perception, and delicacy of the senses are all so far opposed by alcohol, as that the maximum efforts of each are incompatible with the ingestion of any moderate quantity of fermented liquid. A single glass will often suffice to take the edge off both mind and body and to reduce their capacity to something below their perfection of work."

The authorities above quoted are quite sufficient to set forth the deleterious action of this drug upon the healthy organism, although others might still be referred to.

To Recapitulate.—Its effects are to irritate and inflame the stomach, to vitiate the secretions of the alimentary canal and thereby produce dyspepsia,

diarrhoea and dysentery. Its action on the blood is to impoverish that fluid and to cause a retention of fatty matters therein. Its action upon the brain is first congestion of its meningeal coverings. Congestion of the brain substance follows, producing disordered action and finally inducing abnormal changes of structure; impairing, weakening or destroying the harmony of the intellectual operations. It induces a semi-apoplectic condition of the lungs when taken in large quantities, and always favours a determination of blood to this organ which eventually produces diseased structure. It congests the liver (especially when taken in the form of brandy or spirituous liquors) and by its oft repeated action on that organ weakens its structure, impairs its function, and eventually produces a diseased condition of the organ. Upon the kidneys its action is no less detrimental; by its repeated congestions favoring granular degeneration, or Bright's disease; and greatly aggravating Diabetes, if not directly causing it, by its property of exalting the function of the liver to produce sugar and by exaggerating the glycogenesis of health causing an excessive excretion (of sugar) by the kidneys. It may also aggravate Diabetes by its action upon the nervous system producing that altered condition which is favourable to the collection and discharge of sugar from the body.

It is now well known that injury to the sympathetic nerve rapidly induces a strongly diabetic state, as also does the inhalation of anaesthetics as chloroform and ether, so that alcohol, being an anaesthetic to the nervous system, may act in that way to aggravate diabetic symptoms.

Having premised thus much as to its *physiological* action, I now turn to a consideration of its *indications* or *contra indications*, in other words, the therapeutic value of alcohol in various forms of disease.

(Continued in next issue.)

Correspondence.

(To the Editor of the *Canada Medical Record*.)

London, August 14th, 1872.

SIR,—Permit me at the outset to wish all success and prosperity to your new journal. May you be more than satisfied with encouragement from the general profession, and may they find the *Record* entirely devoted to the progress of medicine and free from personal strife and party interests. Your long connection with the Medical Journals of Canada has shewn your confrères that you are honorable, re-

liable and generous, and withall able to fill the place you now occupy.

I have thought that a few remarks on the practice of our profession here might somewhat interest your readers, and so hastily pen the following lines.

The enormous Hospital accommodation of this city cannot but be forcibly impressed upon the mind, and when we consider that by far the greater proportion of these are almost entirely supported by voluntary contributions, one cannot but be more surprised still that they are in successful operation. Medical men connected with these institutions tell me that there is scarcely a family in London but contributes largely each year, and that they consider the Hospital subscription a debt of honor.

The number of the Medical Schools connected with these hospitals are (13) thirteen ; but the chief Medical Schools are in connection with the University Hospital, Guy's Hospital, St. Thomas' Hospital, King's College Hospital, and St. Bartholomew's. These Hospitals have the chief men of the profession in their service. In passing from one Hospital to another, one remarks at once the decided difference there is in practice. Each Hospital has a course of its own which it quietly pursues entirely regardless of what may be thought or done elsewhere. In fact one cannot but see that each attending Physician or Surgeon is resolved to go in a path of his own making, and deciding with confident reliance upon his own judgment as to the course he will pursue with reference to any particular case. Not only is this spirit of individuality noticed between the various Hospitals, but also often among the staff of the same Hospital. One would almost fancy that this state of things would lead to much professional jealousy and discord, but such seems not to be the case. They do not think it derogatory to their individual fame, to freely and frankly accord honor to whom honor is due. In this respect they are worthy of imitation by those who fear to acknowledge merit in another, lest they themselves should seem to shine with diminished lustre. Ability does not fear to deal justly, weakness alone shrinks from competition. As to the practice of the Hospitals, I may say *en passant* that carbolic acid is almost entirely discarded in all the Hospitals. St Thomas' clings (but very gently) to it still, and I suppose this is in part because Prof. Lister was one of her pupils, and his bust adorns her halls. I have no doubt but that in another year or so it will be quite numbered with the things that are past. It is strange that it ever should have attracted attention, when Dr. Richard-

son declares that of some forty disinfectants it stands lowest.

As to the general practice, there does not seem to be much worthy of special notice ; but in those hospitals devoted to specialties one sees more unusual things. With regard to the eye there is much to be learned that is new at Moorfields, and the eye departments of Guy's and St. Thomas' Hospitals. The refinements of diagnosis and the beautiful way in which diseases of the eye are treated, are worthy of all praise. At St. Mark's Hospital for the treatment of fistula, I was much struck with the extent to which the knife is used. It is not uncommon to see five or six sinuses laid open at once, sometimes even to the depth of two or more inches. Not only do they lay bare the track of the fistula, but freely clip away portions of the skin, &c., between the incisions.

With regard to lithotomy, I observed the other day while at Guy's Hospital, that Mr. Bryant, who was then operating for stone, said that they had had seventy consecutive successful cases in children under 10 years of age ; and that in that hospital they used the straight staff *always* ; and he was of opinion that their practice in this respect had something to do with their success.

With regard to diseases of women, I found much to admire at St. Bartholomew's, whose outpatient department is under Dr. Greenbald. Dr. G.'s treatment, especially so far as relates to mechanical means for the relief of some forms of these diseases, is most excellent and in his hands has been largely attended with success. I allude more particularly to his modification of Hodge's pessary, and to his gutta percha uterine stem.

There are many things worthy of notice, which I may hereafter say something about, and will now close with a remark or two upon the attending staff of some of the Hospitals. In Guy's Hospital, there are some 18 or 19 medical attendants connected with it. There are consulting Physicians and Surgeons, attending Physicians and Surgeons, Surgeons to ear, eye and obstetric department, assistant Surgeons and Physicians, and House Surgeons and Physicians, and assistant House Physicians and Surgeons. It is worthy of remark that the law of the Hospital provides that the posts of assistant House Physicians and Surgeons, also House Physicians and Surgeons shall be tenable for three months only, and are obtainable by competition from among the last year students. Also it is worthy of note that the staff of assistant Physicians and Surgeons do all the out-door work, the attending staff confining themselves

to the in-door patients. And not only this, but the attending Physicians and Surgeons, from pure courtesy and good will, as a rule, give two or three beds to the assistant Medical officers. One sees in this the generosity of the older Medical men, and their desire to help on their struggling younger brethren. They thus act as becomes members of a very noble profession.

I would like to draw the attention of the people, as well as the profession in Montreal, not only to what I have said about the attending staff, but particularly to the rules governing the period of tenure of House officer, viz. : to three months.

The supporters of Hospitals here seem to take a more extended view of the subject than elsewhere. The entire and only object of such institutions with them, does not seem to be the *present* relief of the inmates, but with a wise forecast, to prepare as best they may, a *large* number of Medical men who after practical acquaintance with disease in the Hospital, shall go out prepared for their life work.

Again wishing you all success,

I am,

dear Sir,

yours truly,

E. H. TRENHOLME, M.D.

Progress of Medical Science.

SPASMODIC ASTHMA.

BY CHARLES J. B. WILLIAMS, M.D., F.R.S.

I beg to call your attention to a group of affections which go under the title of *asthma*. This word is commonly used as synonymous with dyspnoea, or difficult breathing; but it is more convenient and practical, as well as correct, to restrict it to those kinds of difficult breathing which are accompanied by audible *wheezing*. Here is at once a great practical distinction from the dyspnoea of pleurisy, of pneumonia, of disease of the heart, and of diseases of the blood (anæmia and toxæmia)—these are all *panting*, or *gasping*, with short breath and frequent, but with little or no wheeze. The dyspnoea of *asthma* on the other hand, is essentially *wheezing* and *prolonged*, affecting the inspiration, or the expiration, or both. This is most distinctly witnessed in spasmodic asthma and pulmonary emphysema; but it applies more or less to severe bronchitis, and bronchial catarrh, which carry with them more or less of the asthmatic wheeze.

The simplest, as well as the most characteristic variety of these, is the purely spasmodic asthma. A person subject to this may be attacked suddenly on entering a close or dusty room, on inhaling the fumes from a stable, the odor of impecacuanha, or other smells in peculiar cases; or more commonly, he awakes in the middle of the night with a feeling of oppression approaching to suffocation—referred by some to the

throat, by others to the sternum, by others to the epigastrium—obliging the patient to sit up in bed or in a chair, with the elbows rested on the knees, the shoulders elevated, and the head bowed forward, but all laboring to the utmost in strong prolonged efforts of inspiration and expiration. This painful struggle for breath may last from a few minutes to several days, according to the severity of the paroxysm; and frightful as it seems to witness, and distressing to the patient, yet it is not dangerous; sooner or later the tight breath is relaxed, cough and expectoration sometimes accompanying its relaxation.

Seeing how violently all the muscles of inspiration and expiration partake in the struggle of a severe paroxysm of spasmodic asthma, we cannot much wonder at the notions of older writers on the subject (Bree and others), that the disease depended on an excessive and convulsive action of all these muscles. Laennec first pointed out the true pathology of asthma in tracing it to a spasmodic contraction of the bronchial tubes, which so much impedes the ingress and egress of air in respiration as to call for excessive and violent action of the respiratory forces to affect it. In this temporary constriction of the bronchial tubes we see the immediate cause of the difficult breathing; and this, too, is the cause of its most characteristic sign—the loud wheezing, whistling, piping, and cooing sounds which attend the paroxysm.

The correctness of Laennec's view of spasmodic asthma had, however, been called in question by several writers, who opposed to it the very daring assertion that the bronchial tubes do not really possess muscularity. The supposed muscular fibres, which had been demonstrated by Reisscissen, were declared not to be muscular at all, but merely elastic, and therefore could not be the seat of spasmodic contraction. To settle this question, about twenty years ago I made a series of experiments on animals, and they proved beyond doubt not only the muscularity of the bronchial fibres, but also the kind and degree of irritability which they possess. Under the influence of a galvanic, mechanical, or chemical stimulus the circular fibres of the bronchi contract readily but slowly, and gradually relax when the stimulus is withdrawn. The contraction is more tardy than that of the œsophagus, but more prompt than that of the arteries, and relaxation does not follow for some minutes after. Like other muscular contractility, it becomes exhausted after continued stimulation, and it is recovered by a period of rest.

Although it has been generally admitted that my experiments have clearly proved the muscular contractility of the bronchial tubes, yet from the remarks of recent writers on the subject it appears to me that the physiological offices of this property have not been generally understood. Thus it has been supposed that the bronchial muscles contribute to the rhythmical process of expiration; but if they do so at all it can only be to a slight extent, as their movements are much slower than that of ordinary respiration, besides which it appears to be limited to the larger or middle-sized tubes, and does not extend to those of smallest size. A galvanic current caused little or no contraction when passed through a lobe

within an inch or two of its margin; but the contraction was marked when the current was passed along any of the tubes of the size of a small crowquill upwards. I cannot, therefore, concur in the notion propounded by Dr. Gairdner in one of his able papers, that the finest Bronchi have a peristaltic or vermicular motion like that of the intestines, and that this is the chief means by which fluids are expelled from these tubes. It is probable that ciliary motion contributes to this end, but the expulsion of mucus and other fluids from the bronchial tree is mainly effected in the manner which I pointed out more than twenty years ago—by the rapidly increasing velocity with which the air in expiration passes from the pulmonary cells to the narrowing converging bronchi, and carries with it any loose liquid in its way. The air in entering the lungs passes with decreasing velocity and force as it spreads into the minute tubes and cells, the combined area of which vastly exceeds that of the large branches and trunk of the bronchial tree. On its return in expiration this is reversed; the motion is more rapid and forcible as it converges towards the trachea and glottis, where the process is brought to its consummation in special efforts of expectoration and coughing. This draining operation of the expiratory act is promoted on the one hand by increasing the force of the act by muscular effort; and, on the other, by a moderate contraction of the tubes, which augments the velocity and sweeping power of the air in passing through them. This contraction is effected by the bronchial muscles, which thus assist in the process of clearing the tubes. But if these muscles act in excess, they render the passage too narrow both for free expiration and for expectoration; and this is just what occurs in the asthmatic spasm, which renders these processes slow and difficult. This is the view of the function of the bronchial muscles which my experiments led me to entertain, and which I published and taught in my lectures more than twenty years since. Dr. Hyde Salter, in his late able and elaborate work on asthma, (a) proposes a like opinion, and suggests that the bronchial muscles may also be useful in impeding the entrance of irritating matters into the lungs.

But the most interesting fact discovered by my experiments, with regard to this bronchial contractility, was, that it is influenced differently from that of other muscles by various poisonous or medicinal agents (b). Thus, hydrocyanic acid did not impart it at all, opium and morphia very little, conium and aconite a little more, but belladonna and stramonium almost destroyed it; so that in animals poisoned by these drugs the bronchi showed scarcely any sign of contractility when stimulated. In animals poisoned with strychnia the bronchi seemed permanently contracted, so that a stimulus had no further effect. This is another proof of the antagonistic action of strychnia and belladonna. Now, it is well worthy of remark that the action of these several drugs on the bronchial tubes is quite different from what it is on the œsophagus and intestinal canal. Thus in animals

poisoned with belladonna the œsophagus was as irritable as ever; in those poisoned with opium, on the other hand, the contractility of the alimentary canal is much impaired. This fact has led me to give belladonna in preference to opium in cases of intestinal colic with constipation, and with a far more satisfactory result. I think this mode of investigation worthy of attention, as a means of extending pathological and therapeutical knowledge. We want a more elementary study of the operation of medicines, an examination of the effect of simple drugs on the functions of elementary tissues, and on the constituents of the blood; for without this we cannot hope to understand the operation of complex medicines on the whole frame.

To return to the pathology of spasmodic asthma; there is then no reason to doubt that a continued contraction or tonic spasm of the muscular fibres of the bronchi—constriction of these tubes—is the essential characteristic of this disease. No doubt the contraction of the bronchial, as of other muscles, is controlled by nervous influence; and many of the phenomena of spasmodic asthma exemplify the reflex action of the nervous system in exciting the spasm—for example, mental agitation or irritation of the stomach by indigestible matter will often bring on a fit of asthma—but the nervous element is often not obvious in the clinical observation of the disease. Thus spasmodic asthma often affects persons, not otherwise nervous, when they inhale peculiar smells or when they catch cold; and in my experiments I found that irritating the eighth nerves, had little effect on the contraction of the bronchial muscles, which on the contrary, readily answered to direct irritation. But it is open to further inquiry whether, like the heart and arteries, those contractile fibres are not more influenced through the sympathetic than through the spinal nerves.

However induced, this constriction of the tubes renders the ingress and egress of air to and from the lungs difficult and noisy, so that the process of breathing becomes very laborious and prolonged; all the muscles of inspiration, ordinary and supplementary, are called into violent action, and so the struggle goes on until the spasm is relaxed. If this takes place soon the attack ceases, and there is no remaining disorder; but if the spasm lasts long other disorder ensues in the bronchial membrane and other parts concerned. They become congested from the imperfect and laborious breathing, and this congestion causes increased and disordered secretion; hence cough and expectoration of a catarrhal character commonly accompany or follow a prolonged fit of asthma. So, likewise, if these asthmatic attacks recur frequently, they tend to produce more permanent congestion and thickening of the air passages which continue in the intervals between the attacks, and thus the disease passes from the paroxysmal or intermittent asthma into a more habitual or constant asthma, with which is associated more or less of the general dilatation of the air cells, called by Laennec emphysema of the lungs. I will allude to this again afterwards.

Spasmodic asthma, or bronchial spasm, may

(a) Dr. Hyde Salter on "Asthma," 1860, p. 55.

(b) *Transactions of the British Association for the Advancement of Science*, 1840. Read at the meeting at Glasgow.

originate like a common cold or bronchial catarrh, or from the exposure to the effluvia of a hayfield, of a stable, of a close room, of ipecacuanha, or of other dust; or it may arise from some unknown impurity or peculiarity of the air in certain places; or it may be induced by indigestion, by gouty or other irritating matters in the blood, or by mental emotion. The kind known under the term of "hay-asthma" is very common and I have no doubt is excited by pollen-germs, or some effluvium from flowering grass and other vegetables. It is more distinctly catarrhal in nature, being often preceded or accompanied by sneezing, coryæ, and other symptoms of membranous irritation. But in whatever way asthma may have its origin, when it has once occurred it is very apt to return again, and may be re-excited by any of the causes just mentioned; and generally speaking, the more frequently it recurs, the longer and more severe are the attacks, and the more likely to leave the breathing embarrassed in the intervals.

But you may well ask, further, "What is the peculiarity that makes persons asthmatic?"—that is to say, that makes the causes above mentioned excite in them contraction of the bronchial muscles, instead of causing the more common effects resulting from the operation of these causes on persons in general. We may reply, "A peculiar irritability of these muscles or of the nerves exciting them." But this is only an expression of the fact, and does not explain why these muscles should be more irritable in asthmatic persons than in others. This subject requires more investigation. I do not feel that I can answer it fully, so as to include all instances; but I think that I have traced in several cases signs of a slight structural peculiarity which may give to the bronchial muscles an unusual liability to spasm. This may be designated under the general term of a *slight induration or thickening at or near the root of the lungs*.

In a considerable number of those subject to attacks of asthma, even at an early period, when they are few and far between, I have found, in the absence of the paroxysms, more or less of whiffling or tubular sound in one or both interscapular spaces, generally most in expiration. This may be from enlarged bronchial glands, which are of common occurrence in children, often accompanying enlarged tonsils; or it may be from interstitial deposit under the mucous membrane at or below the bifurcation of the trachea; or it may be from slight partial induration of the pulmonary texture, such as that resulting from an old tuberculous lesion, whether in the form of dwindled and contracted tubercle or calcified induration, but of very limited extent. (c) Either of these lesions, trifling as they may be in extent may increase the irritability of the bronchial tubes, not only by mechanical irritation, but by partially obstructing the circulation underneath the tubes, and thus throwing more blood to the muscular fibres and mucous membrane. It is in favour of this view of the pathological cause of the asthmatic spasm that such changes to an increased extent certainly do occur after often repeated and severe attacks, and operate as the causes of their continu-

ance and aggravation. In cases of confirmed and habitual asthma we have abundant evidence, both during life and after death, of the increased vascularity and thickening of the mucous membrane and subjacent tissues, which changes we shall afterwards find to be concerned in producing the general emphysema of the lungs which usually supervenes.

Spasmodic asthma is of common occurrence in childhood, and is then frequently complicated with eczematous and other eruptions on the skin. So likewise, in adult life it often occurs in connection with morbid and with psoriasis, all being dependant on a gout material in the blood; and this point should be kept in view in the treatment.

Few complaints vary in their tractability more than asthma. Some (severe cases) yield to treatment so promptly and permanently that their cures may be ranked among the great successes of Medicine. I could cite from my notes scores of such in which the disease has been either entirely cured, or the attacks have been rendered so few and so tractable as very little to interfere with the health of the subject. In most of these cases the disease had been comparatively recent, the attacks dating back only a few weeks or months, with clear intervals between them; but in a few instances asthmatics of several years' duration have been cured. But most of the inveterate cases admit only of alleviation and mitigation to an extent also very variable—sometimes considerable and enduring; at others imperfect and impaired by frequent relapses. The causes of these great differences in the tractability of asthma are to be found in the structural changes which may *precede, accompany, or follow* the spasm. Bronchial spasm itself is a simple pathological element, and may be readily relieved by appropriate remedies; but if it is excited by a constant cause of irritation in the bronchial gland, at the root of the lungs or elsewhere, it is liable to recur again so soon as the influence of the remedy is withdrawn. Or, if the spasm have existed long enough to greatly derange the circulation in the lungs and bronchial tubes, and to cause congestion and swelling of the mucous membrane, with excessive and disordered secretion, then the relaxation of the spasm alone will not be enough to effect a cure. Further, the treatment still becomes more complicated and difficult, when from repeated recurrence of the attacks the nutrition of the affected parts has partaken of the disorder, and the narrowing and thickening of the bronchial tubes, and the mechanical distension of the air-cell, become more permanent and convert the case from *spasmodic* or *paroxysmal* into one of *habitual* asthma.

I have before stated that frightful as the difficulty of breathing is in a severe fit of asthma, appearing to threaten suffocation, yet it is very rarely fatal unless when complicated with the disease of the heart, kidney, or other important organ. The mere spasm of the bronchi, although it seems to bring a patient to the verge of asphyxia, is not sufficient to destroy life. Why is this, when it encroaches on the vital functions of respiration more than even some fatal disorders? I think that the solution of this question lies in the fact that a certain degree of deterioration in

the air of the blood in the lungs tends to relax the spasm. In other words when the air and blood becomes loaded with accumulating carbonic acid to a certain extent, this diminishes the muscular contractility, and the spasm is so far relaxed as to ease the breathing and prevent suffocation. In corroboration of this notion I shall adduce two facts. One is that observed by Laennec, that during the asthmatic attack very little natural breath-sound can be heard in the lungs, but that if the patient be desired to hold his breath for a few seconds, or to count numbers aloud as long as he can without taking breath, then the next breath is much more full and deep, as if the spasm had yielded for the moment. Laennec used to say "that the spasm was thus overcome by surprise;" but the more rational explanation is that the holding of the breath accelerated the deterioration of the air to the degree in which it acts as a sedative on the bronchial fibres, which being thereby relaxed, the next breath is taken with more freedom.

The second fact bearing on the same point is that ascertained by my friend Professor Simpson of Edinburgh, that the spasm of asthma may sometimes be relieved by breathing air containing an increased quantity of carbonic acid gas. I have tried this agent, and am convinced that it has some power, but as a remedy it is far less effectual than others to be mentioned presently. But this power of carbonic acid to relax the spasm affords a probable explanation of the limitation to the suffocative influence of asthma.

From what has been said, it may be inferred that the treatment of asthma must vary much in its simplicity and success according to the unity or complication of the disease. Against the bronchial spasm we have remedies which are pretty effectual in most cases. Belladonna and stramonium rarely fail to relieve the bronchial spasm; and in transient cases, where this is the only element, they may suffice to cure the disease. The extracts are the most reliable preparations, and may be given in doses of from a quarter of a grain to half a grain every three, four, or six hours whilst the tendency to spasm lasts. The dryness of the throat which both these drugs often cause may be counteracted by frequently sipping linseed tea or barley water. Sometimes, however this dryness is useful in moderating the catarrhal flux which may follow the spasm.

But in most cases there exists something more than the mere spasm; and therefore we commonly have to give these antispasmodics in combination with other remedies. Thus, often there is inflammatory cold, calling for the addition of salines and counter irritation; and this may amount to bronchitis, requiring the aid of small doses of tartarized antimony. In chronic cases, when the attacks have recurred frequently or lasted long, there is no combination more beneficial than that of iodide of potassium, in two or three grain doses, and ten or fifteen grains of bicarbonate of potash, with the stramonium or belladonna. I believe that I speak within bounds when I say that, with a combination of this kind, I have cured or greatly relieved hundreds of cases of asthma. The efficacy of the

alkaline iodide probably depends on its eliminative and deobstruent action, increasing the secretion of the kidneys and of the bronchial membrane, and promoting the absorption or dispersion of the thickenings and deposits in the tubes, bronchial glands, and at the root of the lungs, which I have mentioned as being often concerned in exciting or perpetuating the attacks of asthma. The diuretic or eliminative action of these medicines may be advantageously increased in some cases by the addition of squill, colchicum, or tincture of cantharides, particularly where there are indications of gout or of disease of the skin. On a similar principle, in chronic cases certain mineral waters are sometimes useful, particularly those of Eauxbonnes and Cauterets in the Pyrenees, Vichy and Ems.

There are several other remedies for asthma in common use—generally much inferior in efficacy to the preceding, but occasionally useful as subsidiary aids, and sometimes they are our chief resources where those disagree. Such is the ethereal tincture of lobelia, which, in doses of from twenty to sixty drops I have known in a few instances quite successful; more frequently it has failed, and sometimes caused much nausea and discomfort. Indian hemp, in doses of a grain of the extract, gave signal relief in two instances, where the usual remedies had disagreed; but in other cases it has quite failed, and has some times caused distressing disturbance of the brain and heart, smoking cigars of stramonium, or of the *datura tatula*, inhaling chloroform (which for safety should be mixed with sulphuric ether and alcohol), and breathing the fumes of burning nitre paper, are expedients which often give relief in individual cases and although this relief is less complete and permanent than that following the use of the remedies first recommended, yet they may be useful where these fail, and, being prompt in operation, may be employed to ward off slight attacks where stronger agents are not required, or before the latter can be brought into effective operation.

Rarely we meet with cases of asthma so severe and obstinate as to resist all medicinal remedies; or it may be that the patient becomes tired of taking medicines, and renounces them in disgust—nay, sometimes I have known the symptoms aggravated by those which are commonly the most successful. In some of these change of air has succeeded wonderfully, and this not always when the change has been of the most salubrious character. In fact, the caprices of asthma with regard to air are very curious and can hardly be accounted for. In most instances, however, a dry atmosphere agrees better than a damp one, and the air of a large town better than that of the country, especially if this be low and damp. Of places in which I have known asthmatics most free from attacks I would mention London (several parts of the West end. Tunbridge Wells, Clifton, Brighton, and Margate (in summer) abroad, Paris, Pau, and Hyères. But asthmatic subjects should try for themselves, and remain as much as possible in the locality that they find by experience to best suit them. In the case of hay asthma, the avoidance of the country during the

hay-making season is necessary with many individuals, and the change found commonly to answer best is either to London or the seaside.—*Medical Times and Gazette*.

ON THE TREATMENT OF DROPSY.

BY FREDERICK T. ROBERTS, M.D. B.S.C., *Assistant Physician at University College Hospital, &c.*

THOUGH only the result of some diseased condition, either general or local, and not in itself a disease, dropsy becomes in many cases so prominent a symptom as to be the chief source of the discomfort or sufferings of a patient. Hence our treatment is often mainly directed to the removal of the effused fluid; and if this can be effected, not only will temporary relief follow, but, in not a few instances, a practical cure may be brought about, in so far that the ordinary occupation of the patient may be resumed for a longer or shorter period. The principles of treatment are so well known that it seems scarcely necessary to allude to them; but my object at present is to urge the carrying out of some of these principles more systematically and to a greater extent than is usually done, and to advocate the earlier and, if necessary, repeated recourse to certain measures which are generally looked upon as only to be adopted as "last resources."

Medicines may often do much in the way of getting rid of dropsical accumulations, but very frequently they are quite ineffectual for this purpose; in the former case their action will be materially assisted by attention to some of the points hereafter to be considered, while in the latter it seems worse than useless to continue their employment, if it can be shown that there are other means more likely to be successful which fairly claim a trial.

The measures to which I desire to call attention are—1. The maintenance of *rest* and of an *appropriate position*. 2. The use of baths, both *general* and *local*. 3. The employment of regular and systematic *pressure*. 4. Removal of the fluid by *operation*. One or other of these may be employed with advantage in different cases, and in many two or more can be combined.

1. *Rest and position*.—The object of this is, of course, to place the parts affected in a posture unfavourable to the action of gravity, so that the veins may not be over-distended, or the fluid tend to accumulate in dependent parts, and thus, with the aid of rest, to promote the absorption of what has already collected. It is in the case of anasarca of the legs, and oedema of the serotum, that attention to this point proves most serviceable. When the former exists, the legs should be kept *uninterruptedly* in the horizontal position, or even somewhat raised above the level of the body; if the serotum is affected, it should be elevated by means of a soft pillow underneath it, or by some form of suspensory apparatus. It is important to *persevere* in this for some time, and also not to neglect it in the early stages, before the fluid has accumulated to any great extent, for it is then that its effects are most marked. It is not necessary that the patient should be confined to bed unless

other circumstances require it, and it is often advisable that he should get up, the affected parts, however, being kept in an elevated position. I have found the carrying out of this principle of "rest and position" most advantageous in many instances; thus, where the dropsy is due to an anæmic condition of the blood and a relaxed state of the tissues, including the vessels, it is generally sufficient to remove this altogether, along with attention to diet and the use of medicines, to improve the general condition. In local dropsies, also, as for instance that which occurs in connection with obstruction in a vein, or pressure, a great deal depends on the due observation of posture; while it gives material aid in the relief of those which are the result of cardiac or renal disease, especially the former. It may appear unnecessary to say so much with regard to this apparently simple and obvious principle, but I do so under the conviction, the result of observation, that it is not followed out, as it ought to be, systematically and continuously; often it is not observed at all, and, still more frequently, only partially and interruptedly, so that any good effects produced are of only temporary duration.

2. *The use of baths*.—The promotion of a free action of the skin has always been looked upon as an important means towards the removal of dropsy; but in actual practice this end is often very inadequately carried out, and thus the good effects which we have every reason to expect from it are only partially obtained. Diaphoretic medicines are of very little value in these cases, and we must have recourse to the *regular* employment of some effectual bath, if we desire to excite the excretory functions of the skin sufficiently to produce any marked benefit. If it can be used, a general bath of course acts best, and either the hot-air or vapour bath is to be preferred; it is especially in the general dropsy of Bright's disease that these are valuable. In many cases, however, especially in cardiac affections, the patient cannot bear a repetition of either of these, and under these circumstances I have found marked benefit from the application of local heat and moisture in the following simple manner, by which the parts are kept in a perpetual local bath. Each leg is wrapped up, from the hip down, in a large flannel, wrung as dry as possible after having been dipped in very hot water, and this is enveloped in a piece of mackintosh of sufficient size, which prevents evaporation and cooling; the flannels are changed about every hour, care being taken to avoid chilling the patient, and the legs are well dried before a fresh application is made. I have often been surprised at the very satisfactory results of this plan, both in hospital and private practice, if persevered in for two or three days, and there is no difficulty, as a rule, in following it out.

The same method of treatment is also called for when the dropsy is purely local, the result of some obstruction in the veins of the leg, and especially when due to a thrombus. Some patients who suffer from cardiac dropsy will not endure the little discomfort that attends the changing of the flannels, and in such cases it is advisable to wash the legs well every

day with hot water, and to keep them wrapped up in cotton-wool and dry flannel.

Though not exactly a form of dropsy, still it may not be out of place to allude to the use of baths in the treatment of "pleuritic effusion," as the same object is sought to be attained here, viz., the absorption of fluid. I believe I have met with cases in which unmistakable proof has been given of the value of the hot-air or vapour bath in aiding the removal of such effusion; and my conviction is, that we do not employ this remedy to anything like the extent we ought in the treatment of this condition.

3. *Pressure*.—In certain cases I have found considerable advantage from the employment of steady and continuous pressure, applied by means of bandages, or some elastic apparatus, care being taken that it is made properly and uniformly, varying its amount according to the nature of the case. Not only is it useful in itself, but it materially helps another mode of treatment, hereafter to be considered.

In local dropsies, the result of venous obstruction, this does more good than anything else; and in some instances I have met with cedema of the legs, which was apparently due to weak action of the heart, and hence feeble circulation, along with a relaxed state of the tissues, great benefit was derived from the application of a bandage. Again, in some cases of chronic ascites, marked improvement has followed the application of a roller very tightly round the abdomen, of which the following instance is a good illustration:—

G. F., aged 20, clerk, was admitted into University Hospital on June 12th, 1871. He had previously been an in-patient, in February, 1868, suffering from an attack of puerisy, and at that time his abdomen began to swell, being at first painful. He was discharged, however, and returned to his work; but in the early part of 1870 he became much larger, and went to another hospital, where he was tapped but filled again very rapidly; he was subsequently tapped five times, at intervals of about two months, the last occasion being on October 21st, 1870. He filled slowly for some time, but gradually became smaller, and was discharged. A fortnight before his admission he felt some shortness of breath, and his legs began to swell, at the same time the abdomen enlarging, and being somewhat tender. On examination, the skin of the abdomen presented evidences of former stretching, the umbilicus was everted, veins not enlarged. There was considerable distension, and this was plainly due to an irregular accumulation of fluid, principally towards the left side, limited by old adhesions. The liver could be felt at first, but afterwards became obscured; some tenderness was experienced on pressing it firmly. The general health was good, and the patient only complained of the discomfort of a distended abdomen and some dyspeptic symptoms. There was no jaundice. All attempts to get rid of the fluid by medicinal agents proved unavailing, and on July 12th the abdomen gave the following circular measurements:—

	Inches.
Opposite the ensiform cartilage.....	36½
Opposite the umbilicus.....	35½
Midway between these two points.....	37
Midway between the umbilicus and pubes.....	31½

About this time I commenced the application of firm pressure by means of a roller, placing poultices of digitalis leaves underneath it, which, however, I do not think had anything to do with the result. From this period an evident improvement took place, as shown by the form of the abdomen, the alteration in the extent and shape of the dulness, and the results of measurement; at the same time the patient expressed himself as greatly relieved. With regard to the ultimate result suffice it to say that the patient left the hospital on August 31st, with the following measurements, and returned to his ordinary occupation, feeling quite comfortable, but still wearing the bandage:—

	Inches.
Opposite the ensiform cartilage.....	34½
Between the ensiform cartilage and umbilicus.....	31
Between the umbilicus and pubes.....	30

4. *Removal of the fluid by operation*.—I now come to the most important part of this paper, which is, to advocate the early and, if necessary, repeated performance of paracentesis abdominis, in appropriate cases of ascites. There cannot be a doubt that this operation is generally looked upon with much dread, and that it is only performed with the view of giving temporary relief, whereas it may be safely employed as a means of permanent cure, so far as the ascites is concerned, and if this can only be removed the patient is often practically restored to health. The danger of wounding serous membranes and admitting air has been much exaggerated, and that fluid may be withdrawn from a serous cavity with most satisfactory results has been well proved in the case of pleuritic effusion. Now, with regard to the cases in which this operation is justifiable as a method of treatment, they are just those with which we are most likely to meet in ordinary practice, viz., where the ascites is the result of cirrhosis of the liver. In such a condition this becomes the *chief symptom* after a time, and the main object of our treatment is to take away the fluid, and thus give relief to the misery and discomfort which it produces. Experience proves the utter uselessness of medicinal agents in effecting this object, and on this account we are the more justified in proceeding to carry it out directly by operation, if it can be shown that this gives any fair chance of success. When the ascites is but a part of the general dropsy of cardiac or renal disease, of course paracentesis can do no permanent good, and therefore should only be performed if absolutely required, which, judging from my own experience, does not often happen; at the same time I may add that the presence of renal disease need not deter us from the operation, should this exist associated with cirrhosis, though it will necessarily render the case less favourable. Again, if ascites is the result of some cancerous tumour pressing on the portal vein, or of a definite cancer or tubercle in the

peritoneum, the operation can only afford temporary relief.

In the cases, then, that I have indicated, viz., those of *ascites due to cirrhosis of the liver*, it seems to me to be a mere waste of time and of the patient's powers to continue a long course of purgatives, diuretics and diaphoretics, especially as these cannot be absorbed at all when there is such a condition of things within the abdomen, and they are much more readily taken up after the removal of the fluid; but I do not think much reliance is to be placed on them, and would rather urge the performance of paracentesis as soon as the abdomen has become tolerably full, the operation being repeated again and again, should the fluid re-accumulate.

In the instances I shall bring forward I have not seen any ill effects from the operation itself, when proper care was exercised, nor did its repetition at all weaken the patient. It is not advisable to take the whole of the fluid away, and if it collects again it is best not to wait until the abdomen has become much distended before proceeding to its removal. Of course it is necessary to maintain the patient's general health by means of a nutritious diet, and, if necessary, stimulants may be given, as well as tonic medicines.

The explanation of the good effects of this treatment is evident enough. Communications normally exist between the portal system of veins and the general venous circulation, while new channels are formed in the adhesions which arise; thus the blood, instead of passing through the liver, is enabled to return through these normal and abnormal communications, which enlarge considerably, provided we can keep the patient alive for a sufficient length of time and relieve the great tension of the vessels, and consequently after a time no further dropsy occurs.

It appears highly probable that the employment of pressure, in the manner already indicated, might be advantageous in conjunction with tapping; that is, as soon as the wound is sufficiently healed, the abdomen might be tightly bound, and thus be prevented from re-filling. I have tried this in two cases, in which it proved successful.

I shall now proceed to give some brief notes of cases, on which I have founded the opinions expressed in the preceding remarks.

CASE I.—An account of this case has already been published in the *Lancet* of October 29th, 1864, the patient having been under the care of Dr. Waters, at the Liverpool Northern Hospital, who kindly permitted me to treat him. It is especially interesting to myself, on account of its exceedingly satisfactory termination, and also because it first suggested to me the adoption of "paracentesis abdominis" as a settled plan of treatment. J. G., aged 32, a sailor, much addicted to drink, was admitted into the hospital on December 29, 1863. He had had hepatic symptoms for three years, and ascites began in the previous July. He presented a most miserable, sallow, and cachectic aspect, and his abdomen was greatly distended, but no dropsy existed in any other part. He became so distressed that it was thought advisable to tap him, *merely to afford relief*; and on

January 14th, 1864, 21 pints of fluid were withdrawn. The liver was then distinctly felt, having all the characters of cirrhosis well marked. The abdomen filled again, and, on February 28th, 30 pints were drawn off, which was rather too much, as the patient had some rather unpleasant symptoms on this occasion. It was found necessary to repeat the operation on March 19th and April 9th, 14½ and 25 pints being respectively removed on these dates. The patient improved greatly in appearance, and in his general health, did not suffer in the least from the operation, and as he gave no evidence of the return of the effusion, he was soon discharged. Subsequently he was under my observation for some months as an out-patient, but I then lost sight of him. More than three years afterward, however, he reappeared, having been to sea, and there had been no return whatever of the ascites, while his general health was excellent. The liver could still be felt, hard, contracted, and granular.

CASE II.—G. F., aged 42, admitted into University Hospital, July 26th, 1871. No cause could be ascertained in the previous history, the patient having lived regularly and steadily. The abdomen began to enlarge in March, and had gradually increased, at the same time being somewhat painful. On admission, he appeared emaciated and anæmic, complained of dyspeptic symptoms, with dyspnoea and cough, due to some emphysema and bronchitis. The abdomen was very large, the skin being glazed and shining, and the umbilicus protruded; there was almost universal dullness, and fluctuation could be readily felt. No swelling of the legs existed. The urine was free from albumen at first, but this afterwards appeared, and gradually increased until it became about one-fourth. The heart was weak, but free from valvular disease. On August 9th the abdomen became very tense, measuring 43½ inches in circumference a little above the umbilicus, the skin looking inflamed, and the patient being much distressed, paracentesis was performed to the extent of nearly 18 pints, which afforded great relief and caused no ill effects. For some days it appeared as if the effusion was again collecting, then it began to fluctuate, and finally to diminish steadily, during which time the abdomen was tightly bandaged. He was discharged, and sent to Eastbourne, the circular measurement above the umbilicus being only 32 inches. Some months after I heard that there had been no subsequent enlargement.

CASE III.—M. A. C., a woman, aged 50, admitted into University Hospital, August 16th, 1871. She had been addicted to habits of intemperance, and had been ailing for about fifteen months. She first noticed a swelling in the legs, which extended up to the thighs and abdomen, and occasionally appeared in the arms and face. When admitted, she presented the signs of very abundant ascites, with much œdema of the legs, loins, and abdominal walls. The circular measurement opposite the umbilicus was 47½ inches, and there was scarcely any tympanic sound on percussion, even in the highest part. The heart was healthy, but the urine contained albumen,

the amount varying from one-fourth to two-thirds, and sometimes casts were present.

On August 26th the patient was tapped to the extent of 16½ pints, the operation being followed for a few days by slight local pain, and on account of the state of the kidneys peritonitis was feared. However, the pain soon ceased, and the patient felt much better. The swelling in the legs subsided considerably. On October 7th it was found necessary to repeat the operation, and 13 pints were taken away. No ill effects were experienced. As soon as the wound healed, pressure was employed, along with poultices of digitalis leaves, and from that time, no fresh accumulation occurred. The patient was discharged, but came to the out-patient room from time to time, where I have seen her recently, and there had then been no return of the fluid.

In addition to these cases, the only already alluded to as showing the satisfactory results of pressure, is also an instance of the value of *repeated* paracentesis, seeing that this was performed several times with ultimate success, though it is not clear what the cause of the ascites was in that case.

I venture to submit that the evidence brought forward in this communication is sufficient to give strong support to the course of treatment which I have advocated, especially when we take into consideration the improbability of any satisfactory results being produced by the administration of medicines. Of course every precaution should be taken, both in the performance of the operation and in the subsequent treatment, and it would be well to explain to the patient and friends the possible dangers which might arise.

In conclusion, I desire to add a few words with regard to another operation, viz., puncturing the legs and scrotum, when considerable œdema exists in these parts. I am satisfied that the simple measure is also often too long delayed, and thus does not give the relief which it is capable of affording. This is particularly true in cases of cardiac dropsy, where a few punctures, repeated for some days, may give material help in removing the fluid altogether, at all events for a time, by relieving the over-distended vessels, and thus enabling them to absorb. Of course permanent benefit is not to be expected in these cases, but it is a great thing to relieve the very unpleasant feelings associated with this form of dropsy. In the case of the legs, it is below the knee that the punctures should be made, as, if they are made above this point, urine may come into contact with them, and lead to erysipelas. It is unnecessary to make large incisions, the punctures produced by ordinary hare-lip pins answer very well. Several may be made at intervals in dependent parts, also on the dorsum of the foot, if required; and they may be repeated, if necessary, so long as there is no sign of irritation. It is advisable to wrap up the limbs in cotton-wool and flannel, which should be frequently changed. As regards the scrotum, this may be punctured in several points on both sides, and then well fomented. Great care must be taken to keep this part clean. In some cases the operation causes it to become indurated, and this condition

resists the further accumulation of fluid.—*London Practitioner*.

HEMORRHOIDS IN PREGNANT AND PUERPERAL WOMEN.

Dr. FORDYCE BARKER gives the following direction on this subject in the *American Practitioner*:

When hemorrhoids are developed during the later periods of pregnancy, the indications are obviously to counteract the constipation or the diarrhœa, and to stimulate and to restore the tonicity of the hemorrhoidal veins. The inquiry will then naturally suggest itself, have we any agent or combination of agents in the materia medica capable of effecting these results? I know of no article which so clearly and positively produces these two results as aloes, and on this I have mainly relied. I am well aware that the general voice of the profession is against the use of aloes where there is any tendency to hemorrhoids.

The special property of aloes is "to excite the muscular contractility of the colon and rectum," and "to stimulate the venous system of the abdomen, and especially of the pelvis." That these are the effects of this agent, I have not only the authority of special writers on therapeutics, as Pereria, Wood and Bache, and others, but I believe the general experience of the profession also will confirm the assertion. It would seem therefore that the use of aloes for the cure of hemorrhoids in pregnant women would have suggested itself from *a priori* reasoning, but I am not aware, from anything that I have read, that it ever has. I suppose that the general impression that aloes is contraindicated where there is any tendency to hemorrhoids, and that it possesses emmenagogue properties, has had great influence in preventing this. In my own case, the use of this article for this purpose was the result of gradually accumulating observation, rather than from any reasoning on the subject.

In the early days of my professional life I was engaged to attend a woman in her confinement, who suffered from obstinate constipation. I prescribed for her Dewees' pills. At the time of her confinement she mentioned that in her former pregnancies she had suffered very much from piles, but that my pills had cured them. If I had known of her hemorrhoidal tendency I should not have given these pills, and I was, therefore, quite surprised by her statement, as the result seemed so contrary to all that I had been taught. From this time I began to experiment as to the effect of aloes in the treatment of hemorrhoids, associated with constipation, in the pregnant; and for many years past I have constantly made use of aloes for their cure, whether the hemorrhoids were the result of constipation or of diarrhœa. I give it combined with other agents, according to the special indications of each case, and in such doses as I learn by experience of the peculiar idiosyncrasy of the individual is necessary to secure one easy, free, daily evacuation of the rectum. Some require a grain morning and evening, while in others a half grain is sufficient. In anemic patients I combine the aloes with the suphate of iron. In the two last weeks

of gestation I always combine it with the extract of belladonna. The following is a frequent prescription with me :

R. Pulv. aloes soc.,
Sapo. cast., aa \mathfrak{Dj} .
Ext. hyoseyami, \mathfrak{z} ss.
Pulv. ipecacuan., gr. v. M.

Ft. pil. (argent.) No. xx.

S. One morning and evening.

When the patient is anemic, I add to the above one scruple ferri sulphat. Some ten days or two weeks before the supposed time of labor I substitute the extract of belladonna, ten grains to one scruple, for the extract of hyoseyamus. When the hemorrhoids are associated with an irritable rectum, and frequent, small, teasing, thin evacuation, I substitute for the hyoseyamus a small quantity of opium, giving a smaller quantity of the aloes, as in the following formula :

R. Pulv. aloes soc.,
Ext. opii aq.,
Sapo. cast., aa. gr x. M.
Ft.—Pill No. xx.

S.—One morning and evening.

It is unnecessary for me to multiply formulæ, as the general principles by which I am guided will be sufficiently evident from the above.

In some cases I have not been consulted, and have not known of the hemorrhoidal tendency of the patient, until my attendance during labor. I have seen the hemorrhoidal tumors sometimes become very large during the labor. Dewees says : " Much may be done during labor to prevent a severe spell of piles by the accoucheur making a firm pressure upon the verge of the anus with the palm of his hand, guarded by a diaper, during the progress of the head through the external parts, and by carefully returning them after the expulsion of the placenta, as the sphincter is now fatigued, and will not oppose their descent." I have frequently tried this expedient, but I cannot say that it has been very successful, as the tumors soon come down again, and under these circumstances they are very apt to become strangulated, inflamed, and cause a great deal of suffering. When I find this condition of things, I have within a few years past adopted the plan of forcible dilatation, recommended by my friend and colleague, Prof. Van Buren. My method is this : the patient being fully under the influence of chloroform, I select the moment of the delivery of the child and before the placenta is brought away. I push back the tumors with the sphincter, if I can readily ; if not, I leave them alone, and introduce both thumbs, back to back, well in the sphincter, and opening them as wide as possible I draw them through the sphincter. During this time I have firm pressure made on the uterus by an assistant, and in several instances the operation was followed by the sudden expulsion of the placenta from the vagina. I direct the following ointment to be applied twice daily to the tumors, and well up in the rectum :

R. Ung. gallæ co., \mathfrak{z} j.
Ext. opii aq., \mathfrak{Dj} .
Sol. ferri persulph., \mathfrak{z} j.
Ft. ung. M.

The result has been in every instance that the tumors have gradually disappeared, and the patients have had very little suffering from the operation.

Where hemorrhoids come on after labor, the suffering is generally much greater than when it occurs during pregnancy. They are very often induced by the action of the purgative given two or three days after confinement.

It is now many years since I have been convinced that castor-oil was one of the worst agents that could be used as a laxative when there is a tendency to piles, as in many instances I have seen its action develop them. For many years I have annually spoken of this to the medical class before whom I have lectured, and I have received many letters from former students corroborating my statement by their own observation. But I have never seen this alluded to, except in one work—viz, Hardy and McClintock on Midwifery and Puerperal Diseases—who incidentally make the following remark : " We may first observe that castor oil is ill-suited for patients who have hemorrhoids, being very apt to produce in them tenesmus and considerable irritation of the rectum." I may add the following from Quain : " Common opinion has assigned to castor oil a character for blandness (probably because of its being an oil) to which it is not entitled. It is an efficient purgative, but, except when given in minute quantities, it usually irritates the rectum."

In Wood and Bache's Dispensatory (article, Castor oil) we find the following : " Some apothecaries are said to use a substitute for olive oil in unguents and cerates ; but the slightly irritating properties of even the mildest castor oil render it unfit for those preparations which are intended to allay irritation." It is curious that its irritating action on the mucous membrane of the rectum has not attracted more attention.

In those who have, or are disposed to have, hemorrhoids I give the following on the second day after confinement :

R. Magnesiae sulph.,
Magnes. carb.,
Potas. sup. tart.,
Sulphur, sublim., aa \mathfrak{z} ss. M.

Mix thoroughly.

Sig.—One, two, or three teaspoonfuls of the powder before eating in the morning.

This powder produces a soft evacuation, without pain, even when the hemorrhoids are inflamed. By procuring a daily evacuation with the powder, and the use of the ointment as before mentioned, I have found the hemorrhoids in puerperal women soon cease to give trouble.

RUPTURE OF THE UTERUS, WITH ABDOMINAL SECTION.

DR. EDWARD WHINERY, reports the following remarkable case in the *Transactions of the Iowa State Medical Society* :

On the 28th of March, 1865, at 8 o'clock A. M., I visited Mrs. S., of Niota, Illionis, a healthy Irish woman about 37 years of age, who, I was told, was

taken in labor about ten o'clock, A. M., of the 27th. The first indication she had of approaching labor was the escape of the waters, soon after which regular labor pains supervened, and an ignorant midwife was summoned to attend her. Labor progressed regularly until about 7 o'clock in the evening when it was expected the child would be born in a few minutes. She was seized at that time with severe burning, lancinating pains, or stitches, as she called them, throughout the abdomen, and the expulsive pains ceased. I found her sitting in a chair, leaning forward at an inclination of about forty degrees, and very unwilling to change her attitude. Her pulse was a hundred and ten, irregular and fluttering; the countenance very anxious and pale; the skin cool and clammy. It was with difficulty I could induce her to assume a position convenient for me to make an examination per vaginam.

I caused her, however, to be held at an inclination of about forty-five degrees, and passing the digital finger of right hand into the vagina and the left hand over the abdomen. I found the head of the fœtus resting well down on the perineum, but by pressing firmly with my finger against the head, it ascended above the superior strait, and the whole body could be distinctly felt through the walls of the abdomen she being of spare habit. The motion thus given to the fœtus very much increased the lancinating pains, and she cried out, "These stitches will kill me." My diagnosis was rupture of the uterus, and I informed her and her friends that her condition was very precarious. We tried to give her "Mutterkorn Thee" (ergot) but the stomach would not take it. The night was very dark, and the husband and his friends were afraid to attempt to cross the Mississippi river in a row boat, as it was very high with much drift-wood floating; she therefore spent the night in applying new corn whisky to the abdomen.

I allowed the patient to assume the attitude first mentioned; returned home for my instruments and an assistant; Dr. J. C. Blackburn accompanied me. At 10 o'clock A. M., when we arrived, no change had taken place in the patient. My friend, Dr. Blackburn, thought, from the visible and physical appearances, and my representations of the case, that my diagnosis was correct, and we soon agreed upon the propriety of making the abdominal section. Dr. Blackburn administered the chloroform while I was preparing other matters. We placed the patient on her back on a table, and I made the incision on the right of the umbilicus, about six inches in length through which I removed a large male child (dead of course) and the placenta, both being entirely above the uterus, which was well contracted down into the pelvis. There was very little appearance of hemorrhage. The rupture was in the fundus from the anterior to the posterior wall. The edges of the wound were now brought together by sutures of silk, taking care to include all the structures except the peritoneum; then finishing the dressing with straps, a compress and a wide bandage. The operation and the dressing were performed in less than five minutes, and the patient placed in bed, still under the influence of chloroform. When she recovered from its effects,

she expressed herself, as feeling quite comfortable and grateful for her delivery from her intense suffering for so many hours. We expected peritoneal inflammation to supervene, but in this we were happily disappointed.

I visited her on the 29th, and found her comfortable; the pulse had gone down to eighty, and every symptom was favorable, the lochia was moderate in quantity; she had been nearly free from pain and slept well during the night, though she had not taken any morphia and quina powders left for her, in case irritation and debility set in.

March 30th and 31st—continues without an unfavorable symptom.

On the 3d of April she sat up three or four hours in bed. The wound had healed by first intention.

On the 5th I took out the sutures and continued the adhesive straps, the compress and bandage; she was then dressed and sitting up.

On the 8th the lochia ceased and she went about her ordinary house work.

On the first of June she menstruated, and again on the first of July; then she became pregnant, and on the first day of this April she gave birth to a healthy female child. I was in attendance and found the "waters" had passed off two days before, but there had been no pain till within three hours after the time of my arrival. The os uteri was well dilated and the head of the fœtus was entering the superior strait; fearing that the former rupture might have impaired the integrity of the uterus, and that we might have the accident repeated, I applied the forceps and assisted the expulsive efforts so that in an hour and a quarter after entering the room I had the satisfaction of finishing her delivery. She and her friends were very much relieved for she had heard that it was the opinion of some medical men that she could not go through the parturition safely after such an accident. There was nothing unusual attending gestation. She says this is her tenth pregnancy, and the easiest delivery she ever had; she generally had had difficult deliveries. Two of her children had been still-born in consequence of protracted and difficult labor.

Within the last fifteen years I have not hesitated to use the forceps at the proper time in preference to giving ergot; it is much more humane and altogether more safe. When the forceps are applied, the danger from rupture of the uterus is passed, and by skillful traction and manipulation during each pain, the suffering of the woman is very much lessened, but the effect of ergot in increasing the uterine contractions is sometimes too horrid to contemplate, and I shall never use it again for such a purpose. I have practiced obstetrics in general practice for more than a quarter of a century, and attended about fifteen hundred cases of parturition, but never met with a case of rupture of the uterus before, and I think this accident would not have occurred in the present case in the hands of a scientific practitioner.

A very large proportion of the cases I find reported in the journals and works on midwifery have proved fatal. Very few who have reported cases have resorted to the abdominal section.

THE TREATMENT OF SPINAL CURVATURE.

Mr. Richard Davy, F.R.C.S., says in the *Practitioner* for March:

The treatment of spinal curvature may be essentially subdivided into—firstly general, and secondly mechanical, treatment.

Under the first count are included rest, sea-side air, strengthening food, oleum morrhuae, careful nursing, and such like; and the late Sir Benjamin Brodie concentrates the essence of such treatment in advising a couch pleasantly situate near the sea-beach; indeed, it is useless to undertake the treatment of this deformity without paying marked deference to the general means of cure; but especial prominence has been given in this short paper to the local and mechanical means of surgical assistance.

Under the second count are included local and mechanical means.

The utmost importance must be conceded to the recumbent posture at an early stage of the deformity. This necessity for early rest is in many instances entirely overlooked by the parents; many a child is unnecessarily tormented by an anxious mother, who runs from one orthopædic institution to another, in the mistaken delusion of thus obtaining the best treatment. The poor child protests, and shows its sufferings by its peevishness and groans; the mother contents herself with the empty self-congratulation of having exhibited her offspring to goodness knows how many doctors. Nothing can so effectually give rest and ease to the diseased vertebral column as this apparently simple recommendation of the recumbent posture; but in reality, amongst the rich this treatment represents a couple of extra servants, amongst the poor it involves an impossibility.

Children, again, not being aware of the importance of rest, are with difficulty kept lying down; probably the easiest means of insisting on this principle of rest is to net over their cribs; whilst amongst the hunchbacks at or about the time of puberty there exists such a refractory impatience of restraint and such precocity as to baffle the good intentions of any surgeon. Before leaving the subject of the recumbent posture, let special stress be laid upon its importance in cases of cervical curvature; so as to avert any secondary implication of either the medulla oblongata, or roots of the phrenic nerves.

The difficulty then, of restraining these cases of spinal curvature led to the employment of spinal instruments, on the principle of relieving the vertebral column of superincumbent weight, while freedom was allowed for taking sufficient exercise to maintain a certain degree of vigor.

What can the surgeon fairly expect from the use of a spinal instrument? Simply support, and a correction of the tendency to increased deformity. As a gardener supports the delicate stem of a plant by a firm stake, or as in young fir plantations side support and an upward direction and shelter are ensured by adjoining stems, so the surgeon uses a spinal instrument to shelter, support, and as it were coax the feeble spine into its healthy, natural position.

Let me now express my strong dissent to the too

universal application of spinal instruments. Surgeons weekly receive applications for spinal instruments where no spinal disease exists, and where the appliance (if granted) would but tend to increase the deformity.

Let me further object to and expose a rather numerous class of individuals, who foolishly believe that their duty to their deformed charge has been performed as soon as the victim has been encased in a spinal instrument, and thus seek to shift the onus of treatment from their own to the surgeon's shoulders.

Still further objection must be taken to the intrusive desire of any instrument-maker to complicate the essential simplicity of a spinal instrument; as a rule, the more movements, the more pay for the instrument-maker; but the more movements, the less relief for the patient.

Complicated movements, if kept in action, must guarantee much interference; if unused, such movements are quite unnecessary.

Side plates are certainly advantageous, if manual support to the projecting ribs and transverse processes gives relief to the patient; and of all elevating principles that have been applied to the crutch of spinal instruments there is none so easy and so practically useful as the principle used by Sayre for extension in cases of morbus coxæ. It allows elevation or depression to be performed easily, safely and advantageously, either by the surgeon or patient; many a sore axilla will be saved, and much more support (consecutive on the growth or improved condition of the vertebral column) will be gained by the further use of his elegant mechanism. Many of the spinal instruments for the Surgical Aid Society of London are now being manufactured by Mr. Lindsay after his plan.

The natural cure of these deformities consists in bony ankylosis of the bodies of the vertebrae; and the frequency of bony nodules being found on bodies of the vertebrae demonstrates how ready nature is to throw out support for a feeble spine; yet even in old permanent fixtures of angular curvature of the spine you may still see movements on the instrument worn, i. e., the officious surgeon endeavouring to undo what nature has wisely done. Let me once more insist, therefore, on the strict simplicity of a spinal instrument, as an agent of support as opposed to coercion.

To summarize this sketch: Grant attention to the sterling value of an early correct diagnosis; good general treatment; the importance of rest; the recumbent posture; and mechanism only as supportive agents.

1. For recent cases with advancing deformity, general treatment, rest, recumbent posture: as nature regains strength, and the bony deposit is being organized, mechanical support, and the sparing adjustments of spinal movements.

2. In chronic cases with stationary deformity, general treatment and mechanical support.

3. In hysterical cases, chloroform must be administered; moral control and physical exercise

employed; and a full exposure given to any smack of deception.

4. In weakly constitutions with slight deformity, tonic treatment, sea side baths, and correction of faulty tendencies.

CONCEALED PRÆ PARTUM HEMORRHAGE.

Mr. Joshua Parsons, of Frome, writes to the *British Medical Journal* :—

The three cases which I am about to detail have occurred to me at long intervals in a tolerably extensive midwifery practice of many years' duration; and, although they belong to a class well recognized and often described by writers on the subject, yet I have found in conversation that many brother practitioners of intelligence and experience, not having had their attention specially directed to such cases, possess but vague ideas of their nature and treatment. There are, however, few accidents interfering with the even tenor of natural parturition more distressing to witness, or calling for more clearness of diagnosis and decision of treatment on the part of the medical attendant, than those of which I am about to speak. It has, therefore, struck me that a record of these three instances, though not otherwise very interesting, may form a footprint for whose guidance some perplexed and anxious brother may be thankful.

Case I occurred in 1840. The patient was the wife of a weaver, a strong and healthy primipara, arrived at the seventh month of gestation. On February 8th she was seized with faintness and a feeling of painful distension of the abdomen; but, as no labor-pains occurred, no treatment was adopted by the midwife beyond keeping the patient in bed. As, however, the pallor and distension increased, I was summoned on the 12th, and found the woman exhausted and exsanguine to a remarkable degree. Upon examination, although there had been no pains or discharge, the os uteri was flaccid and dilatable, the membranes unruptured, and the face presenting. I had at the time no idea of the nature of the case with which I had to deal; but possessed with the dread, instinctive in an accoucheur, of seeing my patient die undelivered, and miles away from instruments or professional assistance, I introduced my hand into the unresisting uterus, and immediately delivered the small dead fetus by the feet. Finding the abdomen but little diminished in size, I thought there was another child to be born, and plied the woman freely with brandy and ergot; and after a while had the satisfaction of finding the placenta thrown off. The cause of danger and perplexity then became evident; for I removed from five to seven pounds of old black coagula. The uterine surface of the placenta showed that it had been detached over its larger part. The woman slowly recovered to a great extent, but was ever afterwards an invalid and remarkable for her extreme pallor.

Case II occurred on December 4th, 1860, to one of those unhappy individuals whose bairntime (to use a Scottishism) was a catalogue of disasters. She had arrived at the eighth month of her eleventh pregnancy, when she was, at 4 o'clock on the morning

mentioned, while lying quietly in bed, seized with sudden deadly syncope. As she lived close to my house, I saw her in a few minutes; and, recognizing the nature of the case, I examined and found the head presenting and the funis prolapsed. Being thus enabled to assure myself that the child was dead, and knowing from former experience that to deliver the patient with forceps was a work of time and difficulty, I did not hesitate to resort immediately to craniotomy, and, after giving ergot, to remove the placenta and a large mass of coagulum which appeared to be of recent formation. The patient recovered and had children subsequently.

Case III.—This patient is the wife of an innkeeper living four miles from my house, and was expecting her seventh confinement in November last. For four days she had been observed to lose her color, and complained of hardness and tension of the abdomen, but had continued to move about and attend to her household duties. On the afternoon of the 19th she fell suddenly in her kitchen, and was for a long time unconscious. When she was carried to bed, a slight discharge of blood was observed, and I was sent for, being told to come directly, as she had a fit. When I arrived she had become conscious, but was tossing about faint and pulseless, with no labor-pains, but a slight sanguineous discharge from the vagina. On examination, I found the os about the size of a shilling, occupied by distended membranes, but very hard and resisting. I immediately sent to my son, Dr. Parsons, asking him to bring various instruments, and intending, as the urgency of the case seemed increasing every moment, to deliver as soon as he arrived. As, however, by reason of distance, a considerable time must necessarily elapse, I determined to do something; and so I ruptured the membranes, and gave at once two drachms of the liquid extract of ergot, repeating the dose in half an hour. Fortunately these means were successful in controlling the hemorrhage; and on my son's arrival the aspect of affairs had so much improved, that we considered it right to wait awhile and watch for the issue. About mid-night labor-pains came on, and the woman was delivered naturally about 2 A. M. The child had been evidently dead for some days, and the placenta was followed by a great gush of fluid blood and many pounds of old clot. The woman is still suffering from exhaustion and bloodlessness, but will, I trust, ultimately recover.

The cause of the accident of which I have been speaking is, to me, obscure. In neither of these cases had there been any over-exertion, nor had either of the patients been exposed to any of those shocks of body or mind which we are accustomed to see followed by hemorrhage and premature birth. In the first and third cases, the pallor and painful distension showed that a moderate discharge of blood had been taking place between the placenta and uterine walls for some days before a sudden and unaccountable increase occurred and produced the alarming symptoms already described. Although the issue was fortunate in these instances, yet I need not tell you it is by no means always so, two or three fatal cases

having occurred within my own knowledge. In the last case, my distance from home led me to adopt measures which fortunately proved successful; but, looking at the tendency to sudden increase of symptoms, I would not voluntarily run the risk of delay, but should make it a rule, where I had reason to believe that subplacental hemorrhage was going on, to induce labor and complete the delivery of the patient by the speediest method suitable to each particular case.

I do not know any condition likely to cause difficulty in the recognition of this accident. In the second case, the sudden and complete collapse and violent pain might at first have led to a supposition of ruptured uterus or abdominal pregnancy; but the round, well-defined uterus, hard as a cricket-ball, and perhaps the absence of tenderness, would at once clear up the difficulty. In neither case did I observe any diseased condition of the placenta likely to account for its separation from the uterus, though the appearances plainly indicated that such separation had taken place to a very large extent.

TREATMENT OF SMALL-POX BY BATHS.

At a recent meeting of the Dublin College of Physicians, Dr. H. BENSON called attention to a form of treatment so prominently brought before the Society on a late occasion by Dr. Stokes. He referred to the treatment by the bath. He was so struck by the result in Dr. Stokes' cases that he determined to adopt the treatment in the next suitable case he met. In a very few days such a case presented itself. The patient was a gentleman residing in one of the suburbs of Dublin. He suffered from an extremely bad form of confluent small-pox. It was remarkably confluent, not only on the face, but also on every part of the body. The pustules were not well filled, but were flat, and the face presented the appearance as if a wax candle had been dropped over every part of it. During the secondary form the delirium became exceedingly troublesome, and the patient quite uncontrollable. For the previous twenty-four hours he had not been in bed for five minutes, and he had had no sleep for over thirty-six hours. Hypnotic remedies had no effect, and it was not possible to apply leeches or other applications to the head. With some difficulty he was placed in a slipper-bath, of the temperature of 98°, and he immediately exclaimed "it's glorious, it's delicious, it's delightful." He became at once calm, collected and obedient, and within fifteen minutes he ceased to have any delirium. After half an hour he slept in the bath for two hours, occasionally waking for a minute or two while fresh water was being added. He (Dr. Hawtrey Benson) kept the patient in the bath for five hours and a half, removing him after that on account of headache which supervened. He was then put to bed, perfectly free from delirium, and with the help of fifteen grains of chloral (of which four times that dose had no effect previously) he slept uninterruptedly for eight hours. The case progressed from that out without the slightest check. Dr. Hawtrey Benson thought that

this treatment did not receive its due measure of attention at the hands of the profession.

Dr. Grimshaw asked what was the temperature of the man's body when he went into the bath.

Dr. H. Benson replied that the temperature could not have been lower than 104°, and the bath was at least six degrees lower.

GUARANA—A REMEDY FOR SICK-HEADACHE.

Dr. Samuel Wilks, F.R.C.P., Physician to Guy's Hospital, says in the *British Journal*:

I wish to draw the attention of the profession to *guarana* as a remedy for sick-headache and at the same time to ask for the experience of those who may already have some acquaintance with the drug. My own knowledge of it dates about two years back, when, after the appearance of a lecture of mine upon sick-headache. I received a letter from Mr. Helmcken, of British Columbia, inclosing two powders which he recommended to me with much confidence as able to cure the complaint. He said that, having heard much of the remedy, "I resolved to try the medicine upon one of my patients who was always coming to me with sick-headache; and sure enough it acted like a charm; and in place of suffering for twenty hours or so, the headache had disappeared in a couple. This accords with what others have told me. Upon my first headache after the receipt of Mr. Helmcken's letter, I took the powder, but with only doubtful effect. I therefore did no more than casually mention the medicine to my friends, but did not recommend it. A few weeks ago, after the appearance of a second communication of mine in the *Journal* upon the same complaint, I received a letter from Mr. Wood, of Montreal, in which he also recommended "*guarana*" as a remedy for headache, and gave a history of his own personal sufferings and the relief which he had obtained. He says: "By taking one of these powders and remaining quiet when I have felt premonitory symptoms by a beginning of pain always in the right temple (headache on the other side, or in any other part of the head, I never mind), I have carried off the attack; and with the first box, absolutely put it off for two months—something which had never occurred in my life before. Upon so good an authority, I determined to try the remedy in a more systematic manner, and requested my neighbour, Mr. Hooper, the chemist, to procure me a packet of the powders. These I have recommended to several patients and friends; and the result is so encouraging, that I have hastened to suggest their trial to my professional brethren. One lady speaks most enthusiastically of their power, as she has now, on two separate occasions, had her headache arrested by their use. The drug has long been known, for mention is made of it in English and French pharmacologies, but appears never to have come into general use. It consists of the seeds of a tree growing in Brazil called *Paullinia sorbilis*; and these, according to Johnstone, in his *Chemistry of Common Life*, are used as we do cocoa. The seeds are ground into powder, and contain an alkaloid which is said to be identical with

that found in tea and coffee. The medicine is manufactured by Grimault & Co., No. 7 Rue de la Feuillade, Paris.

ON THE USE OF NITRATE OF SILVER IN CERTAIN LOCAL INFLAMMATIONS (TESTITIS AND CARBUNCLE).

BY GEORGE COWELL, F.R.C.S. *Senior Assistant Surgeon to the Hospital.*

In offering in the pages of the *Practitioner* the following remarks, advocating the use, as a topical stimulant, of nitrate of silver in certain local inflammations, I would at once say that I advance nothing new, nothing but what has been suggested and written about over and over again. A few years ago Mr. John Higginbottom published a book to advocate its use in cases of erysipelatous inflammation. In it and also in the pages of this journal he recommended its application in one of two forms—the ordinary brittle stick, or the concentrated solution of 80 grains of nitrate of silver to the four drachms of distilled water. The favorable results of the use of this solution in cases of erysipelatous and erythematous inflammations are well known; but the uniform success in my hands, during the last five years, of the use of the solid nitrate mentioned above, in cases of testitis and anthrax, has led me to recommend the more general adoption of this mode of treatment in these cases as I am sure it requires only that its eminently satisfactory results should be known.

And first as to testitis. The ordinary commencement of the treatment of swelled testicle in the acute form is still too frequently the application of leeches. Of late years the plan of puncturing, with a thin, sharp knife, the tunica albuginea of the hard and painful testical, as recommended by Mr. Henry Smith, has been tried by many surgeons, and with, certainly, generally favorable results. The former mode of treatment I have long given up; the latter I have been willing and anxious to try; but so favorable and prompt has been the effect of the application of nitrate of silver, that I have not once had an opportunity of doing so.

The plan I adopt is the following:—The scrotum is held in such a way that the portion of it which surrounds the swollen testicle is rendered—if not already so—sufficiently tense to present a tolerably smooth surface of skin. This is first wetted by means of a sponge, or, better, by a piece of lint, previously dipped in water, and the solid nitrate of silver is then carefully and equally applied over the whole testicle. A suspensory bandage and rest are, of course, prescribed, and such general treatment as may be required. Pain disappears in from two to six hours, and this is accompanied and followed by a gradual diminution of the swelling, the reduction being generally about one-third during the first three days. Considerable smarting occurs for a short time after the application, and sometimes there is some vesication. The further treatment of the case becomes exceedingly simple.

During the last five years I have treated in this

way a large number of cases, and only twice has the application failed to reduce both pain and swelling: in both of these the appearance of the skin of the scrotum showed that the remedy had been but partially applied, and in both the symptoms were rapidly removed by a second and more careful application of the caustic. The rapid effect of this treatment is still more marked in cases of double testitis; the whole skin and dartos of the scrotum contracts firmly around the testes, speedily relieving the engorgement of the capillaries and seeming to produce a gentle uniform pressure on the swollen organs. I have never known abscess to occur in any case treated with nitrate of silver.

In both the forms of anthrax, carbuncle and boil, the application of the solid nitrate of silver affords the most speedy means of cure. One looks back, with feelings almost akin to horror, at the heroic plan of treating carbuncles, sometimes enormous in their size, by crucial incisions; cases, too, occur to one's memory in which, in spite of this operative procedure, the carbuncle still went on increasing in size; where, in fact, the incisions not only did no good, but positively did harm; by the shock to the patient, and the increased risk of pyæmia. A lecture upon this subject by Sir James Paget appeared in the *Lancet*, Jan. 18, 1869, in which he strongly condemned this mode of treatment.

The treatment he recommends is at first a piece of emplastrum plumbi with a hole in the centre; then resin cerate on lint, covered over with a large poultice (half linseed and half bread); and then, later, the careful application of carbolic acid lotion, or some deodorising fluid. With these measures, must of course, be combined cleanliness, fresh air, and a careful regulation of diet.

I have found, however, that the duration of carbuncle is very materially diminished and its extension cut short, by preceding this treatment by the application of nitrate of silver freely over its surface, repeated, if necessary, once or twice after intervals of two days. Immediately after the application a small soft pad of dry lint is applied and retained by means of a piece of strapping and a bandage. The after treatment is the same as Sir James Paget recommends, except that the poultice will be unnecessary, and the internal administration of iron or other tonic will generally be found useful.

Boils are treated in the same way, and will seldom require a second application of the caustic.

The *modus operandi* of the application of nitrate of silver in these cases seems to be the energetic stimulation, and consequent contraction, of the capillaries and small arteries of the part, whereby engorgement is diminished, the vessels are placed in a condition for returning to a healthy function, and morbid exudation is diminished, arrested, and removed.

One case I may mention here. A woman attended at the out patient room at the Westminster Hospital, with a large, hard, and painful carbunculous boil occupying the whole of the lower lip. The lip projected from the teeth to the extent of upwards of two inches, and the increased saliva secretion ran

from the mouth, as of course the lip was useless to retain it. There was a small point of ulceration almost in the centre of the inner side of the lip, that side now facing upwards. The solution of nitrate of silver was freely applied, and repeated once three days later, both times followed by rapid diminution in the size of the swelling, and the case made an uninterrupted recovery.

CYANOSIS FROM NITRATE OF SILVER REMOVED BY IODIDE OF POTASSIUM.

Dr. L. P. Yandell, jr., Professor of Materia Medica and of Clinical Medicine in the University of Louisville, says, in the *American Practitioner* :—

Most practitioners have met with cases of cyanosis produced by nitrate of silver, and such cases were more frequent many years ago, when nitrate of silver was more frequently employed for epilepsy than it is at the present time. According to most authorities the stain is permanent, and not amenable to treatment. Many remedies have been suggested, iodine, nitric acid, and acid nitrate of potash being the favorites; but I have found no cure recorded. As much as fifteen grains of nitrate of silver have been given thrice daily, in pillular form, without injury; but five grains in solution seems to be the largest dose capable of safe administration. It is the generally accepted opinion that the blue skin never supervenes when the remedy is given for a less period than three months. The discoloration first begins about the gums and fauces. It has been found in the coats of the intestines and eyes. It may appear several months after cessation of the use of the medicine, and exposure to the sun seems to predispose to its development.

The stain has been variously described as blackish, bluish, grayish, slate color, and bronze. The mineral is deposited in the deeper parts of the skin, and is most abundant where the skin is most vascular. A blister upon the skin produces a white visicle, as in the normal cuticle.

The two cases which have suggested this report are similar in many respects. Both were young merchants, and both had been treated unsuccessfully for epilepsy by nitrate of silver in their youth. Both contracted syphilis, and for tertiary symptoms got iodide of potassium. This drug was given in from ten to sixty grain doses, thrice daily, for a number of months, in connection with ferruginous or bitter tonics. One of the patients was forced to discontinue the iodide because of its disagreeable effect upon the system. The other took it until all traces of syphilis had passed away, and he increased in flesh under its use. In both cases the fading of the stains was gradual. In the first case there is a faint trace of discoloration remaining, though it is scarcely perceptible. In the second, which was much the darker of the two, there is not a shadow of the disfigurement. The iodide of potassium was not given in either case with reference to the cyanosis, and its beneficial effects were observed by me accidentally more than a year after their occurrence. It may be well to state that both patients were treated by the moist

mercurial vapor bath during much of the time that they were using the iodide of potassium, and the abundant diaphoresis may have assisted the action of the iodide. I would suggest, therefore, for the treatment of nitrate of silver cyanopathia the use of the vapor bath in connection with the iodide of potassium.

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TO OUR EXCHANGES.

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OPENING OF THE MEDICAL SCHOOLS IN MONTREAL.

The lectures in the McGill Faculty open on Tuesday, the 1st of October; in Bishop's College Medical Faculty, on Wednesday, the 2nd of October, and in the Montreal School of Medicine, on Tuesday, the 1st of October. We wish each school a good complement of students.

MEDICAL CASES IN COURTS OF LAW.

There are but few members of our profession who have not at some period of their lives experienced the "glorious uncertainty of the law," and felt that those whose duty it was to fairly estimate the value of services rendered, signally failed in affording that protection which the members of one profession should extend to another. In certain portions of the Province of Quebec so well is this now understood that few Medical men care to waste time in attempting to obtain, by course of law, debts to which they are justly entitled—preferring to loose the an ou it rather than subject their bills to the pruning knife and other irritating tactics of judges learned in the law, but certainly anything but learned in matters pertaining to the Medical profession. One of the most glaring instances of the absurd ruling of judges in Medical matters has recently come to our knowledge, and we place it upon record, as an illustration of the peculiar judgments, which are now and then given in matters Medical. In the City of Montreal, very recently, a Medical practitioner sued a person for a bill of small amount. The circumstances which lead to the suit being taken out were

of a peculiarly aggravating character, or the action would not have been entered upon. The case went by default, and the plaintiff was placed in the witness box to swear to the correctness of the account. He had scarcely done so when the judge said it would be necessary for him to prove the visits before he could give judgment. To this the plaintiff demurred stating that, beyond his individual oath as to the visits having been made, it was impossible to produce other testimony. The judge then said if one visit was proved he would take the oath of the Medical man with regard to the rest. To this the plaintiff gave the same reply as before, stating that if able to prove one visit, he would, in all probability, have been able to prove all. Under the circumstances the Judge (Beaudry) refused judgment, and the case was put aside. At the following term, before another judge, judgment was obtained, without the slightest trouble. We have been induced to bring this case thus prominently forward because it is not by any means the first time that judgments similar to that given by Judge Beaudry, have been rendered. Indeed we are much mistaken if several judgments have not been rendered, demanding proof, additional to that of the Medical man, of the visits having been made, if the account was over a year and a day old. We need hardly express our opinion as to the positive unfairness of any such judgments, for every Medical man will at a glance perceive that, if persisted in and become a rule, it will be utterly useless for any member of our profession to attempt collection in Courts of law; we do not say "Courts of justice" for such they are not always to us. It seldom happens, owing to the unfortunate practice we have of sending in accounts only yearly, that a suit is ever taken out before the account is more than a year and a day old. To demand proof of visits, in addition to the oath of the plaintiff, is, in the vast majority of cases, to give the case to the defendant, for such proof is nearly always a simple impossibility. The more we think of the matter, the more are we amazed that any such demand should be made by those who should know well how very unlikely it is that any such proof can be forthcoming. It requires no argument to prove this; the circumstances attending the call of the Physician to the house of sickness are so well known by the general public that all must at once admit that, to continue to render judgments such as we have detailed, is practically to shut out from the use of the Courts a body of men, than whom none earn their money harder, than whom none are more fully entitled to ample justice at the hands of

those appointed by the Crown to mete it out with reason and honesty.

THE RECENT ELECTION AT THE MONTREAL GENERAL HOSPITAL.

The lamented death of Dr. Fraser, created a vacancy in the attending staff of the Montreal General Hospital, and at the quaterly meeting of the Governors, held on the 14th of August, applications for the appointment were read from Drs. Godfrey, Thompson, Sewell, Ross, Bell and Bessey. The contest, however, was between Drs. Godfrey, and Ross, the latter receiving twenty-six votes to Dr. Godfrey's twenty-one, not a single vote being recorded for any of the other candidates. The election terminated differently to what we had hoped it would, for we felt that, as a prominent member of the profession, and upon the ground of having upon a very recent election tied a candidate, who won by the casting vote of the chairman, Dr. Godfrey had claims upon the Hospital Governors far superior to any of the other candidates. There is, however one point in the election, which as representing as we believe we do, the interests of the general profession, we cannot allow to pass unnoticed. We allude to the fact that the successful candidate was represented to the Governors, and if our information is correct, justly represented as being the unanimous nominee of the Medical Board of the Hospital. If such was the case, we unhesitatingly assert that the members of that Board have placed themselves in a position towards their fellow practitioners in this city, which cannot in our opinion be justified. In fact so long as the Medical Board of the Hospital is permitted to select one from among the candidates and place him before the Governors as their choice, just so long do the Governors of the Hospital, really delegate to them the election, which by the profession is believed to be in their hands. A moment's consideration will show very clearly the enormous odds against all the other candidates, who are thus, as it were thrust aside and compelled to contest, not the individual influence of each candidate, but the united power of the Hospital Medical Board, whose influence will be better understood when we state that for over forty years, the practice we are now condemning has been to a greater or less extent followed. In the past, perhaps, there may have been circumstances which although they did not justify, to a certain extent may have palliated this course. At the present time, there is nothing which can justify it, and in any future election we hope the good sense and delicacy of the Hospital

Medical Board will cause them to stand aloof, taking no part, but willing to receive as one of their number, any member of the regular profession whom the Governors of the Hospital may deem worthy of filling the position. Unless this is done the Hospital authorities, will find that among that class which it is their interest to secure as friends, viz.: the young and rising members of the profession, they are fostering an opposition which before very long will become powerful, and that which by fair and judicious dealing might have been used as a powerful auxiliary to further the General Hospital cause, will be exerted in a directly opposite direction. All of course cannot receive Hospital appointments, but all are entitled to a fair field when competing for them.

MEDICAL ETHICS.

In the formation of Medical Associations, about the first act is the establishment of a Code of Ethics to regulate, among other things, the conduct of physicians towards each other. The necessity which exists for such a code is well appreciated, and they may be summed up in the golden rule of "*Doing unto others as we would be done by.*"

In this city, fortunately for the honor of our profession, physicians are careful of how they interfere with each other, and too much praise cannot be given them as a body for doing so, tending, as it certainly does, to elevate and maintain the dignity of our calling, while at the same time it encourages the confidence of the public.

In many places throughout the country, the reverse unfortunately often occurs, and the amount of confidence which the people of any one section place in their medical advisers may, with but few exceptions, be taken as a standard by which to judge the conduct of physicians towards each other. It is by no means unusual for country practitioners, being actuated by local jealousies, to allow themselves to act unfairly towards a confrere. All honorable men regret that this should be so, because from the want of confidence thus engendered they see their profession undervalued, and themselves placed on a level with quacks, and the latter often preferred because his fees are so much less. It often occurs that, while attending a patient, the practitioner finds that some meddling friend of the family has been belittling his services, and recommending them to send for Dr. So and So; the patient, without consulting his own attendant; does so, and Dr. So and So instead of refusing to take charge till the other is

dismissed, seems only too glad of the chance to injure a confrere, undertakes the case, states that the treatment was wrong and that it was well he was sent for. If called in consultation, instead of being careful not to utter remarks which might cause a want of confidence, takes advantage of the opportunity to display himself, suggests some non-important change, or finds fault with the treatment, thus making an impression adverse to the attendant, and paving the way for his dismissal. Owing to this, many country physicians will not meet their local brethren; they become isolated and cut off from mutual consultation, and as a result an unhealthy competition arises. Dr. A, to prevent Dr. B from getting a case, will charge a less fee, so that in the end the fees become lowered beyond a just figure, resulting in a resort to some other way to make that money, which should have been obtained by the legitimate practice of their profession. Science thus loses her votaries; the mind which should have been occupied with professional matters is exercised in other channels; practice becomes a mere routine amounting often to calomel and opium or hydrargyrum cum creta and Dover's powder.

The time will come, we hope, when practitioners who act thus will see the necessity of subverting all local jealousies and acting together for their mutual advantage, for unless each, while upholding his own dignity, will maintain that of his professional brethren, that confidence on the part of patients cannot be expected which it is desirable there should be. On the contrary there will be a distrust of all because those who should assist confidence, by undermining the reputation of their confreres, create a spirit of retaliation. The public not knowing whom to believe, thus look upon the practice of medicine as uncertain. Our licensing bodies, losing the support of public opinion, are unable to prevent quacks from practicing, or lessen the amount of magic and patent curealls. These lines are written with the hope that some good may arise therefrom; to induce reflection that all members of our profession may see that it is to their advantage to act honorably towards each other, for by no other way will any lasting benefit arise to the individual. Not only will the physician be more respected and his services valued, but he will find himself better off in a pecuniary sense, for it is better to have a fee at a just figure from one patient, than to take the same amount off two patients merely to run out a neighbor. We lose nothing by living honorably and letting others live.—*Com.*

PERSONAL.

Dr. William Sutherland, of Montreal, and his son, Dr. William Sutherland, jr., have returned to Montreal, from their continental tour. We are sure their numerous friends will rejoice to learn that their health has been much benefited.

Dr. T. G. Roddick, House Surgeon of the Montreal General Hospital, has obtained leave of absence for a brief period, and sailed by the *Nestorian* for England on a brief visit.

Dr. Robert Howard has returned from Cacouna, where he was located during the season just closed. Dr. Patton, (of Quebec), was also located at this fashionable watering-place during the past summer, so that, in the matter of Medical attendance, Cacouna was well provided.

Dr. Arthur Brown was at Tadousac during the past season.

Dr. E. H. Trenholme has returned from his European trip. He visited London, Edinburgh and Paris.

Dr. W. H. Mondelet came from London as Surgeon to the S.S. *Emperor*, about the first week in August. He proposes settling in Montreal.

Dr. Thomas J. Alloway, a graduate of McGill College, 1869, has arrived in Montreal, after an absence of about three years, and proposes, we understand, to make this city his future home. On leaving Montreal in 1869, he proceeded to Edinburgh, where he took out the L.R.C.S.E., and the L.R.C.P.E. He immediately after was appointed House Surgeon of the Wadsworth Infirmary, London, which position he held for a year and a half. He then entered the Royal Navy, and was appointed to the Hoslor Hospital. He subsequently went afloat in H. M. S. *Hercules*, and, with the exception of being put in charge for a few months of the Lisbon Royal Hospital, remained in her till he received his discharge in the spring of the present year.

The Medical profession will be represented in the next House of Commons of the Dominion by not less than sixteen members, viz., Drs. Bergin, Brouse and Grant, of Ontario; Drs. Paquet, Robitaille, Fortin, St. George, Fiset and Lacerte, of Quebec; Drs. Tupper, Forbes and Almon, of Nova Scotia; Drs. Schultz and Lynch, from Manitoba.

Dr. R. H. Russell, of Quebec, is in Scotland. We sincerely regret to learn that the serious illness of his son, who was studying medicine at Edinburgh, was the cause of his sudden departure.

Dr. G. A. Baynes, of Richmond, Quebec, has commenced practice in Montreal.

Dr. Wm. Duckett, graduate of McGill College, 1859, after thirteen years most successful practice in St. Polycarpe, has this summer settled in Montreal. He has located himself at the west end of St. Joseph street.

Dr. George Ross has been elected attending Physician to the Montreal General Hospital, in place of the late Dr. Fraser.

Dr. Drake, late Professor of Clinical Medicine McGill College, has been appointed Professor of Institutes of Medicine in the same school—the chair rendered vacant by Dr. Fraser's death. It is reported that the vacant Professorship of Clinical Medicine will be conferred upon Dr. Ross.

Medical Items and News.

SORE NIPPLES.

Glycerine *one* part; sulphurous acid (fresh) *seven* parts, mix, apply several times a day.

Gonorrhœa.—The following injection is recommended by Mr. G. Ashmead, in a recent number of the *Lancet*. Corbolic acid, eight grains; tannic acid, eight grains; glycerine half an ounce; water to an ounce. It is also useful in gleet.

Whooping Cough.—To a child five years old give the thirty second part of a grain of morphia, with three grains of the Bromide of potassium in solution every two hours. Let the mother be instructed to suspend the medicine for four hours, at any time if unusual drowsiness comes on.—*Braithwaite's Retrospect*.

MARRIED.

On the 5th September, at the residence of the bride's father, Beaver Hall Terrace, Montreal, by the Rev. R. F. Burns, D.D., Mr. J. W. Johnson, of London, Ontario, to Sarah L., youngest daughter of Dr. W. P. Smith.

On the 28th August, at the residence of the bride's father, by the Rev. R. H. Adams, William McPhee, Esq., L.D.S., of the city of Ottawa, to Cornelia, second daughter of Thomas McKee Ferguson, Esq., M.D., of Buckingham.

In Toronto on the 5th September, by the Rev. Alex. W. Williams, Walter J. McGill McInnes, M.D., C.M., of Aberfoyle, Victoria, to Clara-Georgina, daughter of R. B. Miller, Esq., Toronto.

DIED.

At Barbadoes, West Indies, on the 6th August, Julia, wife of Clement King, Esq., and eldest daughter of James Bovell M.D., formerly of Toronto, ages 32 years.

Original Communications.

THE THERAPEUTIC VALUE OF ALCOHOL.

BY DR. W. E. BESSEY.

(Continued.)

That the therapeutic value of alcohol has been greatly over-estimated is quite certain, and it is equally certain that such exaggerated notions as have been too generally held concerning it must give way before evidence and enquiry, and the old theories concerning it become rapidly exploded. As in the preceding portion of this article I have not sought to put forward my own private opinions unsupported by other testimony, so, in this, I do not propose to confine myself entirely to my own *ipse dixit*.

I think it will be generally conceded that *contra-ria contrarius curantur*, and not *similia similibus curantur*, is the fundamental principle of allopathic practice; and, if so, there can scarcely be two opinions about the following axioms in therapeutics, namely: 1st. That an *irritant* remedy is never *indicated* to allay *irritation*. 2nd. That a remedy which excites or quickens the circulation is not indicated in a condition of already excited circulation as obtains in congestion and inflammation. 3rd. That a remedy whose action upon the alimentary canal in a state of health is such as to produce an irritated, congested, or inflamed condition with a vitiated condition of the secretions, is not a remedy calculated to allay these conditions when present as disease; and, in short, is not *indicated* in the treatment of such diseases as dyspepsia, diarrhoea, dysentery, or in gastric, typhoid or typhus fevers, diseases in which these lesions are peculiarly characteristic. 4th. That a remedy whose action upon the blood is such as to cause retention of effete matters in that fluid, is not indicated but contra-indicated in diseases primarily dependent upon such a state of things for their origin, as in gout, rheumatism, plethora, obesity, &c. 5th. That a remedy whose action upon the nervous centres is to produce degeneracy of structure and impairment of function, must be contra-indicated and *not indicated* in debility of the nervous system. 6th. That a remedy whose long-continued action upon a glandular structure is known to promote structural changes cannot be indicated in organic degeneration of such organs. 7th. That an agent whose introduction into the healthy system is known to lessen the tone of muscular fibre and produce lessened functional capacity or impaired function in nerve tissue, thus causing muscular and nervous debility,

is not indicated as a promoter of strength in cases of prostration from disease. 8th. That a beverage whose action is to produce excitement of glandular function, and thereby stimulation of the mammary glands to the production of an excessive secretion, which secretion, under such circumstances, has been proved to be deteriorated in quality, though increased in quantity and which eventually produces loss of function in a part, is not wisely indicated for the use of nursing mothers. 9th. Is it therapeutic wisdom to administer to a man prostrated to the lowest ebb of life, a course of stimulation which all experience shows will prostrate a person in health, even to the extent of producing delirium tremens, functional and even organic derangement and death? 10th. As food is acceded to be that which repairs tissue waste, and as physiological chemistry teaches that alcohol contains no substance which can supply the want of tissue of any portion of the system, even that which results from common muscular activity and from the very pulsations of the heart itself; therefore not being able to furnish elements for structural repair, it is not a food and cannot afford even muscular strength; and must be regarded as only the scourge applied to the back of the slave or the horse, which excites but to exhaust, and is not the flour or beef in the one case, or the hay and oats in the other, upon which the exhausted frame falls back to recuperate its wasted energies. In short, why recommend the administration of a class of beverages to give strength to the system, which Dr. Brinton and others have proven cannot be taken without loss of strength. As fuel, it has been supposed to heat the body, but the experience of Arctic navigators and others exposed to cold, is, that it diminishes instead of increasing the heat of the body and the power of resisting cold and exposure; and that oils, sugars and starch, are the kinds of food which heat the body. It may be argued that the patient may be kept up for days in the state of continued excitement produced by small doses of alcoholics frequently repeated, until the patient recovers. This cannot be, for the over-excited organism needs repose and must and will have it. Thus a degree of activity above that which the exhausted organism (in low forms of disease) is capable of sustaining is produced, and, as a necessary consequence, a corresponding depression follows, the exhausted vital forces give way, and, if the patient was barely at living point before, and the enfeebled organs barely capable of performing the necessary vital functions, the prostration which follows must be below living point, and the poor typhoid, or maniacal inebriate, whose exhausted nature

seeks repose, falls below his vital zero and is gone—"gone to that bourne from whence no traveller e'er returns," to require the restoration of his physical system.

It might well have been supposed that an agent which has worked such a baneful influence upon the moral condition of millions of the race, and which modern investigators have clearly established to be a fruitful cause of disease, would have, long ere this, been expelled from the list of remedies for disease, or have been confined to the narrowest limits which necessity would permit, instead of having been allowed, upon the *ipse dixit* of a Todd, however eminent or successful (although his success has been questioned) to become the almost universal panacea of human ills, or, as especially in its milder forms of ales and wine, to have become alike the sauce of the gourmand and the condiment of the dyspeptic. All the while the great Apostle being held responsible for the teaching, because, forsooth, he happened to advise his younger brother to take a little "wine for his stomach's sake," and "his often infirmities." At the same time, that it may fairly be questioned whether St. Paul was not a much wiser theologian than physician, in which latter capacity there is no account of his excelling.

I argue, besides, that the truly scientific physician will never prescribe a remedy the precise nature and strength of dose he does not fully understand. Now, as most alcoholic preparations are of variable strength, he has no means of knowing this except by surmise or testing; and as to the particular form of alcohol present, whether *methylic*, *ethylic*, or *amylic*, he is quite as far from having the remotest conception. The difference in the action of these various forms of alcohol is very clearly stated by Dr. W. B. Richardson, F.R.S., as follows: "Does he (the physician) want a quickly acting stimulant, which eliminates rapidly, taking out little force, he has it in methylic alcohol. Does he want an alcohol that shall create a more lasting impression (draw out more power) he has it in ethylic alcohol. Does he want to reduce the body, to prostrate it for many hours, he can do it with amylic, or butylic, or caproylic alcohol. But, (he continues) when he is ordering alcohol by the general loose names of gin, brandy, rum, wine, or ale; he has no conception of what he is prescribing nor of the effect of his prescription."

Baron Liebig, thus argues, in his *Animal Chemistry* (1863), as to the *force wasting* action of alcohol and its consequent negative character as a food: "The circulation will appear accelerated at the expense of the force available for voluntary motion,

but without the production of a greater amount of mechanical force." "Wine," he continues, "is superfluous to man. It is constantly followed by the expenditure of power. These drinks promote the change of matter in the body, and are, consequently, attended by an inward loss of power, which ceases to be productive because it is not employed in overcoming outward difficulties, *i. e.*, working." In other words, that alcohol abstracts the power of the system and employs it in the endeavour to eliminate the alcohol itself, instead of in some useful endeavour.

I argue that alcohol is contra-indicated in all forms of indigestion and dyspepsia, because of its action upon the albuminous food, solidifying it and thereby making it more difficult of digestion; by its action upon the pepsine of the gastric juice rendering it incapable (until a fresh supply is thrown out) of dissolving the albuminous articles of food in the stomach; thus, in two ways interfering with digestion and favoring indigestion. Again, it irritates the mucous lining of the stomach, favors repeated congestions of the organ, inducing change of structure, vitiating the gastric secretion and thus promoting positive organic disease, as induration and ulceration in the organs, and by its action in promoting congestion of the mucous membrane of the whole alimentary canal, aggravating all such cases as diarrhoea, dysentery and congestive forms of fever. Speaking of their use in such cases, Dr. Ellis says: "If they do not relieve they are sure to aggravate, therefore, they are not safe, and I do not use them; nor is their use necessary, as there are plenty of remedies far more certain as well as more safe."

In all diseases affecting or impairing the function of the several organs engaged in the important office of nutrition, emaciation results as a consequence of lack of nourishment, accompanied by a wasting of the tissues of the body; for the system, in the absence of a supply of nourishment, has been obliged to draw upon its store-house of nourishment or fatty deposit, through the absorbents, for the support of the vital functions, and the exhausting process may be greatly exaggerated if the poison acting be one exerting a depressing power over the nervous system, as in the case of typhus and typhoid. If alcohol were *food*, then, under these circumstances, it would be strongly indicated, and must prove beneficial rather than hurtful. On this point Dr. Lees remarks: "The end of food is the generation of force, with which man performs the works of life. But the possible methods by which food can generate power are only three: (1) by the organisation of tissue; (2) by the supply of the chemical ingredients of the blood; and

(3) by furnishing fuel for oxidation and the consequent production of heat. It is now seen that alcohol can do none of these things; it cannot make tissue, or supply salts and phosphates, or feed the furnace."

Dr. Lionel S. Beale, M.D., F.R.S., physician to King's College Hospital, in a paper read before the British Medical Association, 1863, says of alcohol as a remedy: "Alcohol does not act as food; does not nourish tissues; it may diminish waste by altering the consistence and chemical properties of fluids and solids. It cuts short the life of rapidly growing cells, or causes them to live more slowly. The remedies which act favorably, really seem to act, not by increasing vital power, but by decreasing the rate at which vital changes are proceeding. The tendency to increased formation of adipose tissue may be explained upon the same view; and the stunting which follows its exhibition to young animals is readily accounted for."

However, in a recent article (1872), in the *Medical Times and Gazette*, he (Dr. Beale), claims that alcohol is digested and assimilated, augmenting the biliary secretions and increasing the production of bile, fat, liver sugar, amyloid substance or glycogene, and therefore is food to the system; although he admits that it does not nourish tissue, and does not raise but lowers the bodily temperature. Now, granting that it does all he now claims for it, what advantage? Does the ability to produce exaltation of function and excessive secretion of an organ without nourishment of tissue or elevation of temperature constitute an article a food? Evidently not. Besides, are not excesses of bile, (as in bilious disorders) of fat, (as in obesity and fatty degeneration) of sugar, and amyloid substance or glycogene, (as in diabetes) objectionable conditions and unfavourable to the health and well-being of the person in whom they exist. Or even if these conditions can be produced during fever—which he confesses the difficulty of doing without risking congestion of the alimentary canal, brain coverings or lungs,—what advantage is to be gained, if—as he asserts—no heat is obtained from this extra quantity of fat and sugar in the blood, besides the questionable advantage arising from an excessive and disordered secretion and a retention of effete matters in the vital fluid, since it is proven to favour an excess of those decomposing organic compounds which physiology teaches us, are always present in the circulating current, especially in fevers, in which disease elimination and not retention is called for. Hence if alcohol could even be proven to be a food in fever, (which I deny) it must at least be one of doubtful quality.

Professor Lehman (physiological chemistry) says: "We cannot believe that alcohol, &c., belong to the class of substances capable of contributing towards the maintenance of the vital functions." On this point Dr. Ainslie fancies that (in some mysterious way) it does support the system and sustain life, but cannot explain how. Dr. E. Smith, F.R.S., says: "Alcohol is not a true food. It interferes with alimentation (1859). If it were food it would support tissue or produce heat (both of which actions have been claimed for it erroneously). On this latter point Dr. Ainslie, in a lecture to the Royal College of Physicians (1867), abandons the notion that alcohol warms the body. He says: "Alcohol, as has been abundantly proven by the admirable researches of Dr. Sydney Ringer, does not elevate but reduces bodily temperature, when given even in the largest non-intoxicating doses, except in cases where the temperature is already below the normal standard. There can be no doubt," he says, "of the correctness of this observation, which I have repeatedly verified." This being the fact, it is evident that the administration of alcohol in cases of collapse, &c., should first be preceded by the employment of the thermometer to ascertain the exact degree of temperature at the moment, and whether it be below 98°, the use of which will also shew the influence of the remedy in this condition. This remark is particularly applicable to cases of extreme prostration in typhoid or other low fever, where its administration is resorted to. For that there are conditions or states in typhus and occasionally in typhoid fever where stimulants are beneficial is unquestionable; but the kind of stimulant selected, the time and mode of administration, and the question as to their necessity and safety at particular periods, are questions to be decided by the judgment and experience of the attendant. My own judgment is decidedly in favor of ammonia, either in the form of the spiritus mindererus, or the aromatic spirits; and my experience would favor their early and continued administration, in moderate quantity, in connection with fluid nourishment. On the subject of the therapeutic value of alcohol as a supporter of the system, or food, Dr. Lees says: "General experience, special experiment, the quantitative measurement of the lessened oxidized products of combustion in the blood, and the test of the thermometer, all unite in a demonstration of the fallacy that alcohol is a warming agent or fuel to the body; and, whatever the science of the future may settle as to the destiny of alcohol, it cannot disturb in the least the certainty of this fact."

It is contra-indicated in meningitis and cerebritis

or congestion of the brain and its coverings, as also in similar affections of the cord, except in the stage of collapse, when its use becomes dependent upon the judgment of the practitioner. It is contra-indicated in functional and organic affections of the heart, in the former adding to the difficulty by inducing loss of muscular power, and in the latter case inducing fatal syncope. Its deleterious action upon the liver contra-indicates its use by persons laboring under such affections, and its action in promoting the formation of sugar by the liver is sufficient to contra-indicate its use in diabetes. In the form of gin, or malt liquors, it is especially hurtful by favoring congestion in Bright's disease; and in lung affections the facility with which it produces congestion of that organ causes it to be strongly contra-indicated. It is, therefore, found to be *not* a nitrogenous food or restorer of the system when reduced under the action of wasting disease, and *not* a carbonaceous food or heat producer; and it must also be adjudged contra-indicated in exalted functional or organic diseases of the brain, lungs, liver, kidneys, stomach and bowels. It remains now but to consider the propriety of its administration in low fever cases, and to nursing mothers.

There can be no doubt that a stimulating dose of alcohol may be used with advantage in cases of sudden faintness or temporary prostration where there is no loss of substance, and where the system merely requires to be roused to take care of itself. And it is useful also in cases of prostration from mechanical injuries and in fainting from loss of blood. It may even be resorted to with advantage in paroxysms of depression in fevers and lingering diseases, unattended with inflammatory action or important organic lesion. While externally as a spirit bath for restless children and infants, it is often serviceable, producing by its anæsthetic action upon the peripheral extremities of the nerves, a gently soothing anæsthetic effect, much more pleasing and satisfactory than that obtained by the use of opiates and soothing cordials. It is also useful externally, as a powerful sedative and soothing agent, acting, both by its anæsthetic influence and its evaporating tendency, as a sedative lotion. I can imagine a condition of feebleness of the digestive organs, where congestion is absent and there is no symptom of irritation, in which it may be of temporary benefit in promoting digestion; but of such cases Professor Laycock, M.D., thus speaks: "Indigestion, being temporarily relieved by alcoholic stimulants, it lays the foundation of an ever-growing habit of taking them in women, and excites a more and more urgent desire in the drunkard; and it is in this way that

many persons of position and education become irrecoverable sots." And upon this point Dr. Wilks, of Guy's Hospital, London, in his lectures on diseases of the nervous system, says: "I have seen so many cases of persons, especially ladies, who have entirely given themselves up to the pleasures of brandy drinking, become paraplegic; and from what we hear of our continental neighbours, it would seem that the diabolical compound styled *Absinthe*, is productive of exhaustion of nervous power in even a much more marked degree. It would seem that the volatile oils, dissolved in the alcohols, give additional force to its poisonous effects."*

As regards its value as a therapeutic agent in fever, two uses have been suggested for it as a medicine in this class of diseases; the one, that of a *fuel* to support animal heat when solid food cannot be taken; the other, that of an anæsthetic, like chloroform, which will prevent the destructive waste of the nervous system, as evidenced in low muttering delirium—the use, as it were, of a brake upon a car going down grade. My opinion in this case is, that *facts* are opposed to *fancy*, that milk, cracker, gruel, animal broths, fruit juices, grapes, unfermented wine, or even claret wine, would be better *fuel* than alcohol, and the old-fashioned spiritus mindererus and aromatic spirits of ammonia, are infinitely better as stimulants, while frequent sponging with cold or tepid water, cold affusions, (*Currie*), packing in cold wet sheet (*Brand*) immersion in cold bath 10° below temperature of body (*Murchison*), vinegar and water, or, (as there is no possible objection to its external use,) frequent spongings with the spirit bath (3 j spirits vin. rec. to 3 xvj. water) of *Neligan*, are infinitely preferable for soothing the nervous

* Dr. Amory, of Paris, "considers the symptoms induced by the use of *Absinthe Liqueur* as different from those induced by alcohol. In absinthism there being no paralysis but violent epileptiform convulsions; while, in alcoholism, paralysis is the prominent symptom." That alcohol does produce epileptiform convulsions, and favor them when established, I have had ample evidence in general practice. I have now in my mind two persons, one is peculiarly subject to epileptiform convulsions when intemperate, but when abstaining they become much less frequent, not appearing for a period of from six to eight months. A young man of good family has this summer been much given up to dissipation, which, after an excessive bout of drinking and abstinence from food for several days, has resulted in epileptiform convulsions of the most violent character, attended with loss of intellect for hours. Four of these have taken place in a single day. Abstinence from spirits, the use of food and liberal doses of ammonia bromide have arrested their appearance for weeks. At the time I write a return to his old habits has caused the fits, though not so severe or frequent, to re-appear.

system and regulating the pulse. Although in the early stage of congestive fevers there is no remedy at all equal to aconite in very small but frequently repeated doses,— $\frac{1}{4}$ to $\frac{1}{2}$ a drop every hour.

The treatment of fever *without alcohol* is, in my opinion and experience, not only the most rational, but also, in a very large proportion, the most successful. In the years 1860-61, I had the opportunity of witnessing epidemics of typhoid and puerperal fever; the latter in company with my then tutor, Wm. Freeman, Esq., M.D., M.R.C.S., Eng., the former in company with Dr. William Hume, (since deceased.) The result of my observations in those epidemics was that in nearly every case where alcoholic stimulants were largely used there was great debility with prostration, in some cases death, while in all the cases of recovery the main dependence had been placed in spiritus mindererus and nourishing diluents, chiefly milk. The mortality was about five per cent. In the puerperal fever cases, all those in whose cases blood-letting or leeching was resorted to, died. The use of alcoholics aggravated the local symptoms of metritis and increased the prostration, while opium, spirits terebinthinae, and simple emollient poultices to the abdomen, with simple diet, and spiritus mindererus, almost ad libitum, seemed to act more favourably and favour recovery.

With respect to the prevailing errors in the stimulating or alcoholic theory of practice, Dr. Archibald Billings, London, in "Principles of Medicine," thus writes: "Tonics give strength; stimulants call it forth; stimulants excite action, but action is not strength; on the contrary, over action increases exhaustion. One thing necessary to the recovery of the nervous system in fever is arterial blood. To produce this of good quality, *digestion and free respiration are required*. (Both of which alcoholics interfere with.) The digestion having been disturbed, (as shewn by Carpenter and Beaumont,) it is useless to supply other than fluid nutriment—I have found milk the best—until some renewal of the nervous energy takes place. This restoration will not be expedited by (alcoholic) stimulants."

In 1863 an epidemic of typhoid fever broke out in Franklin, a frontier district, Province of Quebec. I had just graduated, and spent the season in the place treating a number of fever cases, ten of which were typhoid. Among this lot I lost one, a case of typhoid, aged 43 years. I found in all the cases a predisposition to congestion of either the lungs, brain coverings, or bowels (enteritis). My principal remedies were spiritus mindererus (in maximum doses every three hours,) sulph. of quinine with sulphuric

acid—and port wine. I had been taught to believe in the wine treatment. My experience was that, in a number of cases the wine was refused or not agreeable, and, when taken, aggravated the fever symptoms. I accordingly depended in those cases more especially, on quinine and milk diet, with beef tea, to support strength, and liqr. ammonia acetatis to allay fever. All these did well. My patient who died used the same remedies up to the twenty-first day. I stopped the liqr. ammonia acetatis, fever symptoms being all gone, and gave wine (8 oz. in 24 hours) and beef tea freely. Milk was refused by this patient. He grew more prostrated daily; congestion of bowels (enteritis) ensued, and he sank, utterly exhausted, in three days.

That fever may be successfully treated without alcoholic stimulants I have often proven since in general practice, and I am borne out in this opinion by the reports of Dr. Henderson, of Shanghai, and Dr. Bishop, of Naples, who reduced their mortality rate from twenty-eight to seven, by abandoning alcohol as a remedy. Also by Dr. King Chambers, (physician to H.R.H. the Prince of Wales.) who, under the stimulating plan, lost one patient in five. Without stimulants only three deaths in 121. And he thus speaks to his students on the subject: "Above all, I would caution you against employing wine as a substitute for the true restorative treatment. It may be useful as an *adjunct*, but never in its place."

Dr. Higginbotham, F.R.S., Nottingham, says:—"I was educated to the opinion that port wine was absolutely necessary in the low and sinking state of typhus and typhoid fever, and was desirous of forming a wine depot, with the assistance of my benevolent friends." Soon after the typhus fever broke out in a village in Derbyshire, and it was observed that numbers of the rich died, who had been treated with the artificial stimulus of wine, and that the poorer lived, who had little else than natural stimulants, pure air and pure water, and simple (principally milk) diet. The fact was so apparent that it became a common saying: "The doctors were blamed for killing the rich, and the Almighty was praised for curing the poor." From this simple fact I was induced to try the experiment of treating typhoid fever without wine. My treatment of the fever (for four months in the parishes of Barford and Radford) was, attention to free ventilation, cleanliness, particular attention to the digestive organs, commencing with an emetic dose of ipecacuanha, aperients, salines, and in the low stage a decoction of Peruvian bark, and, throughout, a light nutritious diet. "I only lost two patients—*both of them had wine given them by their friends*, as I afterwards discovered." He also

speaks of another subsequent epidemic in which, with his son, he treated twenty-seven cases without alcohol—giving quinine sulphate with a compound infusion of orange peel only, with frequent supplies of mild nutriment night and day. The result was most successful. He says: "There is no doubt patients often recover in spite of the wine given; but, after long experience and observation, I am of opinion, that its administration in typhoid fever is always injurious in its operation, and often fatal in its effects, the patients dying from exhaustion." I hold that alcoholics are especially contra-indicated in fever, from their direct influence in impairing digestion and interfering with respiration and preventing the due oxygenation of the blood. Oxygen being the stimulant, *par excellence*, which the system needs in low forms of disease. So much so is this the case, that chlorate of potash, yielding six equiv of oxygen in its decomposition, is found to be one of the very best possible remedies in the low forms of typhus and typhoid. Alcohol, by its faculty of causing the retention of at least 30 per cent. more carbon than is usual in the blood, diminishes the vitality, or life-sustaining quality of the blood, and thereby adds so much the more to the peril of the case. On this subject, Dr. Vierordt, of Carlshure, says, as the result of experiments: "The mean number of expirations in a minute is fourteen; that number increases after meals. The amount of carbonic acid expired diminishes considerably after the ingestion of fermented liquors, and does not return to its natural quantity for the space of two hours."

Professor Lehman says, on this point: "We should forbid the use of spiritous drinks, and not prescribe tinctures, which might hinder the necessary excretion of carbonic acid." Dr. Lees says: "No doubt alcohol does hinder the excretion of foul air from the body, and retains effete, bad matter of various kinds; thus promoting, on the one hand, the production of diseases like rheumatism and gout, and, on the other, of bilious and typhoid fevers." All this goes to show that, under the administration of alcohol in fevers, the body is not properly ventilated, the blood not duly oxygenated, the digestive functions but tardily performed—all of them conditions operating in direct opposition to the patient's recovery. The proverbial predisposition of drinkers to erysipelas is another evidence of the truth of the position, that the blood is rendered excessively impure from retained effete matters, the morbid element being chiefly bile. For "it never occurs except when the whole mass of blood is surcharged with biliary elements, and the attempt of the system to get rid of it rapidly through the

skin is what constitutes the exanthem known as erysipelas," (Trall), which condition is induced by the use of alcoholics.

Dr. Ainstie, author of "Stimulants and Narcotics," 1865, is almost the only authority who still clings to the idea that, in some mysterious manner, alcohol *does* act as a food in low forms of disease. This he gathers from the patient's ability to live without anything else than spirits and water for a given time, which is merely due, in the opinion of competent physiologists, to a lessening of vital function, which is sustained in a less degree of action by the fats already stored up in the system. In fact the patient like *Bruin* in winter, lives upon his own tissues, and emaciation and debility is the result, followed, on partial revival of the digestive powers, by a voracious appetite. He considers alcohol an anæsthetic, and lays great stress upon its usefulness in the treatment of neuralgia, and, after advancing the idea of supporting the organism, in the absence of ordinary food, by stimulants, and considering that from small doses there is no recoil, but an improvement in the tone and frequency of the pulse, he goes on to speak of its sedative influence as that which is beneficial (?) in inflammatory affections, namely, the reduction of unduly frequent circulation, by the administration of wine and spirit; thus admitting, in one portion of his work, the sedative action of the drug, and in another, asserting that there is no recoil from its use in fevers. He says further "The classical illustration of the favourable *soporific* influence of alcohol (not its stimulating or tonic influence, as some would have us believe,) is to be found in its use in low fevers, such as typhus and typhoid. Given a certain rapidity of pulse, we may nearly always assure ourselves, in cases of these diseases, that the patient will be unable to obtain natural sleep, but, in place of this, will pass off into a state of coma or delirium. There is nothing which meets the exigency of this condition with an efficiency which at all approaches that of alcohol, administered in repeated non-narcotic doses," Where this effect is obtained it is due to its sedative or anæsthetic action upon the nerves.

After denying the correctness of the assertion that a depression, or recoil, always follows stimulation, in p. 79—by working out the problem of continuous stimulation in this way, that, after each dose the patient would have sunk lower than ever before. Ignoring the fact of the melting away or absorption of tissue to supply the place of food, and also the presence of food in the form of milk, broths, &c., as usually given, he goes on to say: "If stimulation means the calling forth, that is, the getting rid of a

certain quantity of force already existing in the organism, either the accumulated stores of this must be immense, or they must be simultaneously repaired by that which can create force, or the vitality must, after a very short time, become completely exhausted, and the patient, whether cured of his fever or not, must be "improved off the face of the earth." This, however, is actually what does happen, as can be shewn by the increased mortality rate under the use of alcoholic stimulants; and, even in Dr. Anstie's own work, he admits this, at page 129, where he says: "So well known is this effect (that of reducing undue frequency of the pulse) that a certain degree of frequency of the pulse is taken very commonly as the best indication for the necessity of administering stimulants, at the same time that he admits (1865), with Dr. Stokes, the importance of testing the strength of the heart's action by the audibility of its sounds through the stethoscope." Although he thinks, nevertheless, on the whole, the mere frequency of its action is the safest guide. He cautions against a too free use of the spirit, stating its object to be to administer small quantities at short intervals. "For, he says to narcotise a fever patient, is a most serious and dangerous step; and the well-meant zeal of those who have desired to procure sleep, has often induced coma, from which the patient has only recovered to *collapse* and quickly sink." Thus admitting, in the plainest terms, the prostrating and dangerous effects of alcohol in this disease, except in the smallest doses. He is still more explicit in 1868. three years later, when he lays down as the law (in an article in the *Lancet*, January 25th) that alcohol cannot be scientifically administered *until* the urine of the patient has been analyzed, and the sphygmograph, (not the stethoscope as before the sphygmograph was invented) or pulse writer has been applied for the course of many hours; otherwise, mischief, not benefit, will result. He says: "Even the slight and trivial symptom of flushing in the face is a sign of the first degree of the poisonous action, namely, a vaso-motor paralysis, and shows that, at least, we have touched the border line at which the beneficial action of the alcohol ceases, and its poisonous effects begin."

Now, I think it is pretty clear from the admissions of Dr. Anstie himself, (the greatest advocate of alcohol as a medicine in the present day,) that, in fever, at least, "it does not elevate but reduces bodily temperature, when given in even the largest non-intoxicating doses, *except in cases where the temperature is already below the normal standard, 98°*; and hence I argue that its advocates should never

order it without having first ascertained the temperature of the body by the *clinical thermometer*. Dr. Anstie also admits an important fact, in recommending the use of the *sphygmograph* as a test of the degree of tonicity present in the muscular walls of the heart and coats of the blood vessels—which is a direct test of the degree of muscular tone in the whole system. Now, if these precautions were resorted to, we should soon have the question definitely settled as to whether alcohol does improve the muscular tone of the system under disease, or not. Sir Benjamin Brodie, F.R.S., in his "Physiological inquiries" thus speaks of alcohol as a means of procuring rest in the irritability of fever. He says: "Alcohol removes the uneasy feeling and the inability of exertion which the want of sleep occasions. But the relief is only temporary. Stimulants do not create nervous power, they merely enable you, as it were, to use up that which is left, and then they leave you more in need of rest than before."

The valuable aid of the thermometer, as an index of animal heat, and the sphygmograph as an index of muscular tone or debility, during the administration of alcohol is well illustrated series of experiments published in the *Chicago Medical Journal* of 1867, one was with Bourbon whiskey, the other with sherry wine. Results as follows:

		Temp. in mouth.	Pulse.
Before whiskey drank at	10.30 p.m.	98½	83 per min.
After 4 oz.	" 11 "	97½	85 "
" " "	11.30 "	97½	89 "
" " "	12.30 a.m.	97½	85 "

"The sphygmograph shows that while the number of beats increased from 83 to 89 per minute during the first hour, the *force* of the heart pulsations was weakened, whence a congestion of the venous radicals, (which Dr. Anstie warns against as the first indication of its injurious action) would ensue."

Dr. King Chambers writes: "Physiologists have always taught, as confirmed by all experiment, that large doses of alcohol immediately, and small doses after a time, depress the nervous centres; the primary action is anæsthetic—a diminution of vitality in the nervous system."

The use of the sphygmograph does not express the whole truth, although it does much, for we must have to do, in prescribing alcohol, with the quality as well as the quantity, and the precise indications intended to be met by its administration. On this point Dr. Aitken speaks strongly, showing the extreme variance in the strength of alcoholics generally prescribed, and protests against "the blindly empirical and routine mode in which alcoholic beverages are generally prescribed in absolute ignorance of their constitution and genuineness." (P. 242, Practice Med., vol. II.) (*Concluded in the next No.*)

CANADIAN MEDICAL ASSOCIATION.

The fifth annual meeting of this association opened in Montreal, on Wednesday, the 11th September, in the Building of the Natural History Society. The attendance of members from the Province of Quebec, was fair, but the other Provinces of the Dominion were sparingly represented.

A letter was read from the President of the Association, (Dr. Sewell, of Quebec,) stating that up to the last moment he was in hopes of getting away, but that the critical condition of one of his patients made it impossible for him to leave.

Dr. C. C. Hamilton, Vice-President for Nova Scotia, was called upon to preside, and Dr. McNab, from New-Hampshire, was requested to take a seat upon the platform.

Dr. David, drew attention to the fact that at the last meeting, a resolution had been passed rendering the proposer and seconder of any new member, liable for the subscription.

Dr. Marsden, of Quebec, then read the following address of the President :

GENTLEMEN,—The next thing in the order of proceedings is the address of the President. Last year Dr. Parker extended his observations over such a very large field, embracing almost every possible subject, that I really find but little left to comment upon or suggest. There are, however, one or two points upon which I would like to touch briefly. It is to be regretted that little or no progress was made last session with the Medical Bill. It will be again submitted to-day for your consideration, and in its discussion it is very much to be desired that all sectional or private interests may be laid aside. The question is not this Province or that, this school or the other. We are here to discuss and adopt such a "Bill" as will conduce most to public good and the elevation of our own profession. Let me, therefore, bespeak from the members of this Association that reciprocal kindness of feeling, which will tend greatly to the peace and harmony of the meeting, while it will expedite the business in which we are all so interested. Medical education is, without doubt, the most important subject that can occupy the attention of a body like this. No argument of mine is necessary to show that this must be the foundation of the professional character in every country. I trust, therefore, that the Bill now to be considered and which has for its object the advancement of medical education in this country, will be sufficiently advanced at this session that it may be laid before Parliament at its next meeting. On looking over the curriculum to be enjoined on medical students I am struck with the small amount of time given to clinical instruction. Although two courses of three months upon clinical medicine and clinical surgery are all that is required at most of the recognized schools, still a moment's reflection will satisfy any one that this is far to little. Clinical instruction, as

now conducted, is made subordinate, and, as it were, a secondary branch, instead of being put forward as one of the most important and most indispensable subjects of professional instruction.

The importance of demonstrations in lectures, upon all subjects, medical or otherwise, requires no proof, and surely no demonstration can be so effectual, to the medical student as the illustration of the remarks of the professor, by an exhibition of the patient in all the different phases of the disorder. Again, not only should the number of clinical lectures in the different schools be increased, but greater facilities should be afforded to the student to prosecute his studies at the bed-side. For this purpose the Hospital Fees should be much reduced, or, if possible, entirely abolished. With regard to this matter I am happy to say that in Quebec we have taken a step in the right direction. Our hospitals are almost free, while the number of clinical lectures on medicine and surgery, apart from those given on diseases of the eye, amount to 360 per annum—240 only are required by law. I believe the student cannot too soon commence his attendance at the hospital, and although his medical education may not be sufficiently advanced to enable him to profit by this attendance, to its fullest extent, still if he is observant, he will pick up much which will be invaluable to him hereafter, and he will learn much which will render the lectures he will receive later on in the College far more intelligible, and therefore far more profitable than they would otherwise be. To the same effect is the language of the great Trousseau. Addressing his class he says: "Clinical instruction should not be deferred till near the end of the student's curriculum. From the day on which a young man determines to be a physician, he ought to attend the hospital. It is essential to *see—to be always seeing*—sick persons. The heterogeneous materials, though amassed without order, are nevertheless excellent materials. They may be for the present useless, but at a later time he will find them stored in the treasure house of his memory." And they will become of incalculable service to him. Let me here throw out a hint which, if acted upon, might be of advantage to our students in all the different schools. I allude to the situation of house surgeon in our various hospitals. Hitherto, I am of opinion, these officers have retained their appointments too long, to the exclusion of others from those advantages, which they themselves (it is to be presumed) no longer require. In each hospital I would like to see a house surgeon and an assistant house surgeon. The former should be a licensed practitioner, the latter a student in his fourth year, who, if found qualified, should succeed his chief the following year on being received. By this arrangement each house surgeon would spend two years in the hospital, a rotation system would be established, a stimulus would be given to the students, and a larger number of them would benefit by the advantages thus afforded. I do not hold positively to the periods here laid down, but I believe the hint here thrown out might be acted upon, or modified, to the great advantage of our students. Again, in the interest of the students, there is yet

another point upon which I would touch. I allude to the adoption of trimestrial examinations in all schools of medicine. My colleagues and myself can testify to the immense amount of labour which this entails on the professors, but we can also testify to the immense advantages it affords the students—and herein we are amply repaid. These examinations are conducted by a committee of the Faculty, each professor examining on his own branch in the presence of his colleagues. At Laval there are three terms in each year; consequently the student undergoes twelve of these almost public examinations in the course of his four years' study. The advantages to be gained by the students are, first, and perhaps above all, a strong inducement to him to commence his studies in earnest the very day he enters college; secondly, by these examinations he discovers whether his lectures or private reading have been profitable to him or not; and lastly, he learns to appreciate and take in the full scope of his professional questions, and, by frequent habit, he obtains a facility of answering. The quarterly examinations above alluded to are of course an addition to the usual weekly examination in each class. The course of study is I see to extend over a period of four years. This is not too long, but perhaps it would be well to specify distinctly in the bill that no degree *ad practicandum* could be conferred before the full expiration of his term.

It has been suggested by the Association of Medical Superintendents of American Institutions for the Insane, that in every school of medicine, conferring degrees, a course of lectures should be given on insanity and medical jurisprudence as connected with disorders of the mind. As most of the cases of insanity in their earlier stages come under the care of the ordinary physician, this is, perhaps a subject which may advantageously occupy the attention of the different collegiate councils of this Dominion.

Last year Dr. Parker directed the attention of this Association, in very earnest language, to the necessity of establishing institutions for the treatment of inebriates. It is very much to be regretted that up to the present moment the Government of this Dominion has taken no action in this most important matter. It is true that Dr. Wakeham, with that enterprise and intelligence which have always characterised him, did some years ago, at his own risk and cost, open an institution in the neighborhood of Quebec, for the purpose alluded to, and has maintained it ever since upon a most respectable footing, though I fear at a considerable pecuniary loss. This he has borne, in the hope, hitherto a vain one, that Government would ere this have come to his assistance. It is also true that an Act was passed by the Local Legislature in 1860, authorizing the interdiction of inebriates, so that now these persons may be controlled and sent to such institutions for treatment. So far so good. But still this does not exonerate the General Government from the great responsibility which lies upon it in this matter. I agree entirely with your late President that all governments are as much morally bound to make provision for the treatment of this class of sufferers as they are to find hos-

pital accommodation for the treatment of other forms of disease, whether of the mind or body. It will no doubt have been seen by many of you that Drs. Parrish and Dodge, Superintendents of the Sanitariums of Binghamton and Media, have been formally invited to appear before the British Parliament to give a detailed history of Inebriate Asylums in the United States, the system of treatment adopted in them, and its success. This is a most praiseworthy step on the part of Great Britain, and will be followed no doubt by other governments, our own, may it be hoped, included.

There is yet another subject to which this Association might call the immediate attention of the Government.

As the law now exists no insane person, however violent (*being also an epileptic*), can be admitted into the public asylums of the country. The consequence is our gaols constantly contain several of these doubly afflicted persons, who are exposed to the jeers and gibes of those around them, inducing, no doubt very frequently, epileptic paroxysms, which, under more favourable circumstances, might have been avoided. Why an insane person, because he is also an epileptic, should be less dangerous to himself or others, or requires less the protection of Government for the same reason, I am at a loss to understand. On the contrary, being doubly afflicted, he should be a special object of sympathy, care, and protection. I believe this matter has only to be brought under the notice of the Government to be at once remedied. There are some other points upon which I might well, as for example the better regulating of the duties of chemists and druggists in large cities, medical fees in courts of justice and at coroners, inquests, &c., but as there is a good deal of work before the Association, and but little time to do it in, I prefer waiving these, so that we may proceed at once to the discussion of the bill.

The address was ordered to be printed in the transactions of the Society.

Dr. Marsden, Quebec, stated that in consequence of many members not paying their subscriptions and from the paucity of their numbers, the Society had so far been unable to publish several very valuable papers, which had been read before them. They were extremely valuable, and to obtain them the profession would pay any price. Dr. Howard's paper, read at Toronto three years before, was full of statistics of priceless value—but practically they were a dead letter—for the Association was unable to publish them. During the course of the meeting he would give notice of a motion upon this subject.

Upon motion of Dr. R. Palmer Howard, the following nominating Committee were appointed:

Dr. HAMILTON, of Nova Scotia, Dr. Bot-ford and Dr. Freeman, of New Brunswick; Dr. Hamilton, of Ontario; Dr. Marsden, Dr. Tessier, Dr. Peltier, Dr. Digenais, Dr. Lafleur, Dr. F. W. Campbell, Dr. Beaubien, Dr. Scott and Dr. Hingston, of the Province of Quebec.

Dr. R. PALMER HOWARD, chairman of the Bill Committee, stated that as the usual routine business had been proceeded with, he considered that the time

had arrived to consider the much vexed Bill. He said that it would be in the recollection of many of the members of the association that at the meeting held three years ago in the City of Toronto in Ontario, which was a very large and influential meeting, a resolution was almost unanimously passed, appointing a committee to draw up a Dominion Medical Act, the object of which was to render the system of medical education, medical examination and registration, uniform throughout all the Provinces of the Dominion. The Association at that time seemed to have imbibed the spirit which was so rampant in political circles, respecting Confederation. It did not require very much forethought, nor did it require very much sagacity to see what a great boon it would be to the medical profession generally to have a uniform system of admission to the practice of medicine throughout the whole of Canada. Amongst the best minds at that meeting, the oldest and most matured minds, there was a general *consensus* that it would be a great boon to the profession if the young men, in all the provinces, had to go through a somewhat similar course of instruction, so that there should be the same standard of education, both preliminary and scientific. Starting with that great general principle, it was determined to get a representation of the interests of each province and each university, which should form a committee to consider the subject. In the discussion of the Bill it was right to say that a very active part was taken by the members of the profession of Montreal. It so happened that he was appointed the chairman of the committee, and that being a very important post he naturally consulted with the influential members of the profession residing in Montreal. They had several meetings, which were attended, some of them, by gentlemen who were not members of the committee, and who represented the profession generally. Independently of those meetings he had held extensive correspondence with gentlemen in the various provinces, and all the suggestions thrown out by these persons were embodied, as far as they could be, in the bill, when it was presented to the committee for the first time in Session at Ottawa. That Committee met the day previous to the General meeting, and it was 3 o'clock in the morning, before the bill reached the state in which it was presented to the association at Ottawa. At that meeting it was agreed by general consent that only the great principles of the bill, the great matters upon which there might really be honest difference of opinion, should be discussed, and the minor matters of detail left to be discussed afterwards. A series of very important amendments were adopted at Ottawa, altering very much the character of the bill. The number of representatives was altered, the proposals to have branch councils was rejected, and it was agreed that there should be but one examining board, so that, as they would see, three very important principles in the bill were altered, though not in his opinion, improved. It was then agreed that the bill as amended should be printed and distributed amongst the profession and brought up for discussion at the next annual meeting to be held at

Quebec. It so happened that the amendments were not embodied in the body of the bill, but were printed upon the back. When the Committee met at Quebec, they proceeded to embody them in the body of the English bill, and so presented it to the meeting. It was not however seriously discussed, as the French members of the association objected strongly to its discussion being then entered upon, as the amendments were not embodied in the body of the French copy of the bill. In this way discussion was evaded, and no progress was made. At the Ottawa meeting, the Ontario members being present in large numbers, had spoken—in fact it was their vote, which extinguished the branch Councils, and substituted one great Central Examining Board, but as there were few Lower Canadian members present, their voice was not heard. Last year at Quebec, the discussion was evaded, but to-day he hoped to get an expression from his fellow practitioners of French origin. What he asked the association to do now was to proceed to discuss the leading clauses of the bill, so as to get an expression of opinion from the association, respecting the great principles involved in the measure, and not to attempt to take up all the clauses. He would mention further the clauses which he believed to be the principal ones. The fourth was that respecting the General Council, and of course was one of the most important clauses, dealing as it did with the number of members to compose it, and the proportion to be assigned to each province. Then clause 21 was one of the leading clauses of the bill, for it was one affecting the registration, and determining whether a young man should not only hold a diploma from a University, but also pass an examination before the Licensing Board, or whether the diploma should be sufficient. The 24th was important, empowering the Council to appoint a board of examiners; the 25th would naturally be one of these important clauses, for it decided who should compose the examining board, and what interests should be represented. The 26th also came under the same category, as it defined the powers of the councils in the matter of examining students, and the 28th clause which gave power to the Council to recognize or otherwise new medical schools. These clauses really contained the pith of the whole Act, and if they could agree respecting the principles involved in these clauses, there would be no difficulty in arranging the details afterwards. Therefore, he moved that the Association should resolve itself into a committee to proceed to discuss the bill.

The Association then went into Committee, Dr. Marsden in the chair. The time of adjournment having arrived, the Association adjourned till half-past two o'clock.

AFTERNOON SESSION.

When half-past two o'clock arrived, the attendance being too small to discuss the bill, Dr. De Bonald read a paper on the extinction of Syphilis.

He stated that it was one which a few years previously he had read in Paris, and his object was to explain how the disease might be eradicated, and to

give rules for preventing fresh contamination. The feeling of American medical men was that this disease could be cured, but the question was how could the number of syphilitised persons be ascertained? He proceeded to detail the various methods by which the necessary information might be obtained, but all of them he abandoned as virtually impracticable. The disease was one which could be avoided, and this encouraged him to construct a plan for its eradication. His project was first to subdue the existence of syphilis, and secondly to give rules and regulations for the prevention of fresh contamination. He next went to explain the plan which he had conceived as the means of ridding society of the enervating disease which constituted the subject of his paper, the foundation of the plan being the increase of strong sanitary and police regulations, the working of which, as he detailed them, he was satisfied would exterminate the disease, and leave no chance for further contamination.

Dr. TESSIER, Quebec, thought that the question was a most interesting one, but it was one in regard to which the people seemed to be asleep, though it was cutting down the manhood of the country every day. He strongly doubted the practicability of the proposal as to statistics, but to put the houses of ill-fame under the control of the police would have a good effect in diminishing the disease. He thought that the meeting was indebted to the lecturer for bringing the matter before the society, for the study of the subject would do a great deal of good, and moved a vote of thanks to him, which was carried.

Dr FRANCIS W. CAMPBELL, Chairman of the Committee upon Canadian Necrology, read the following report.

MONTREAL, September 11, 1872.

The Committee upon Canadian Necrology beg to report that death has taken away two prominent members of the association, during the period which has elapsed since the meeting in Quebec last year.

First on the list is the name of William Fraser, M.D., M.F.P., and S., Glasgow, one of the foremost physicians of Montreal, and Professor of Institutes of Medicine in McGill University; also an attending physician of the Montreal General Hospital, who died on the 24th of July, after a brief illness. Dr. Fraser had practised his profession in Montreal for nearly forty years, and was esteemed by all who knew him. His professional brethren looked upon him with confidence as a sound and able practitioner, and his death is a loss not only to the profession of the city in which he lived, but to this association, in which he took much interest.

Second on the list is one well known to all who have at all regularly been present at the meetings of the Canadian Medical Association—Jean B. Blanchet, of Quebec, whose death occurred on the 21st of July. At the organization of this association, at Quebec, in 1867, he was one of the most active medical men present; and in the following year, when the association met at Toronto, he was elected Local Secretary for the Province of Quebec. In 1870 and in 1871 he was re-elected

to the same position, which he filled throughout the whole term of his election, with the utmost fidelity and attention. Dr. Blanchet graduated at McGill University in 1863, and immediately went to England, taking out while there the diploma of the Royal College of Physicians, London. On his return he settled in Quebec, where he was rapidly gaining a first class position. He had suffered for a year or more from a troublesome malady which at length required surgical interference. In May of the present year he submitted to an operation at the hands of Dr. Hingston, of Montreal. His recovery quickly followed, but in a couple of months afterward another disease was manifested, which in a comparatively short time cut him off. By his death the profession in Quebec have lost one of its most prominent members, while this association has lost one of its most indefatigable workers and supporters, as well as a pains taking office-bearer.

All of which is respectfully submitted,

FRANCIS W. CAMPBELL.

M.D. L.R.C.P., Lond.,
Chairman.

On motion this report was ordered to be published, with the proceedings of the Association. Dr. George W. Campbell suggested that extracts from the report should be sent to the families of those whose names were mentioned. He thought it would be a graceful act to do so, and that it would be appreciated. It was agreed that this should be done.

Dr. F. W. CAMPBELL enquired if the Committee on Necrology were only to include in their report those members of the Association who died during the year, or whether the Report should include all prominent members of the profession.

The Chairman announced that it was not to be confined to members of the Association.

Dr. HOWARD, moved that the Association again go into Committee to discuss the Medical Bill.

Dr. LE BARON BOTSFORD of St. John, N. B., moved in amendment.

"That it is inexpedient to occupy the time of this Association with a discussion on the Medical Bill." He believed that one of the great difficulties the Association had had to contend against had been the discussion of this bill. It had been before them at several meetings, but even supposing that they could all agree upon it, the question arose whether it would be received by the various Legislatures. It might be said that they could only make the trial, but if, in making the trial they took measures which were destructive to their association, he would ask them why they should do it this injury. In doing so they injured an association which ought to range around it the intellect and numbers of the professions. Why was it that there were so few persons present that they might in reality say that the association was dying out? They ought to render themselves prominent by the course they pursued, and ought to have up scientific subjects for discussion and treat them in such a manner as to command the respect of the medical profession, and the public generally. Men came to the meetings of that Asso-

ciation to teach and be taught. When they assembled there they expected to be benefitted by the discussion of such matters as interested every one. The humblest might be able to give them information which would be useful, and if they spent their time in that way it would be better and more beneficial than if they frittered away their time in attempts at legislation, which when finished might not be acceptable. For these reasons he thought that it would be better for them to throw out the bill and attend to the business which would give them a standing in their own eyes, as well as in the eyes of the public at large.

Dr. TRENHOLME, (Montreal) seconded the motion, on the ground that there were not sufficient persons present from Ontario, there being only three present from that Province, where there were more than one half of the medical men in the Dominion; and inasmuch as the bill which was contemplated was one intended for the whole Dominion, it was impossible that they could enter upon its discussion with the hope of obtaining any practical result. Until they found that in the Dominion generally, and amongst the profession generally, there was a more recognized necessity for introducing such a bill it was in vain for them to attempt to carry it out. If it could be carried out, if it were possible to obtain a central examination board, no one would be better pleased than he would; but he believed that they were wasting their time, injuring the Association, and losing the benefits they might otherwise obtain by the interchange of medical opinion, by discussing the bill.

Dr. MARSDEN, (Quebec) thought it was very evident that the bill, as it stood, was not going to be acceptable to all the profession. If they could carry the draft of a bill by any majority at that meeting, they could not go to the Legislature and present it as the sentiment of the Dominion of Canada. They could not say that it was the sentiment of Ontario, though they had a law there which was similar in many respects to the one proposed to be brought forward, the Ontario Bill, and which was a very excellent one indeed. He had been looked upon with suspicion for saying that, it was an excellent one and would kill out the Homœopaths and Eclectics, but it had done so. But he did feel that, seeing there were only three gentlemen from Ontario, even if they carried their proposal, they could not go with any grace to the Legislature and present it for the Dominion, as it would be opposed by the Ontarians. In medicine, as in politics, unfortunate divisions were the ruin of everything, and therefore he hoped that the discussion would be postponed *sine die*.

Dr. GRANT, M.P. (Ottawa) said that at the last meeting of the College of Physicians and Surgeons of Ontario, of which he was a member, he had presented a copy of the Bill with a view of obtaining their views, and he found them unanimously opposed to it. Among the outside profession, the same feeling prevailed—viz. opposition to the contemplated Bill. For his own part, he should like to see some bill which would meet the requirements of the profession generally, but he was satisfied that the profession

in Ontario was averse to any legislation which would interfere with the bill they now had. At the introduction of the Ontario Bill he was opposed to it, but although he was as strongly opposed as he could be to it, yet he knew that since its passing not one homœopathic or eclectic practitioner had graduated in the province of Ontario. Prior to the passing of that bill no less than from 25 to 30 graduated annually and obtained as good practices as men who had graduated honorably in a university. He was satisfied that if the bill had accomplished no other good, it had done a great benefit in putting down the principles of homœopathy and eclecticism, and establishing the principle that there was only one basis for entering the profession—an educational one, and not the flimsy basis on which homœopathy and eclecticism rested.

Dr. ROTROT, (Montreal) said that while in favor of a common standard of Medical education, he thought it advisable that each province should retain the management of it.

Dr. HINGSTON (Montreal) did not see why they should throw away the bill. If there was any necessity for a bill of this kind three years ago, there was a still greater necessity for it to-day. He did not agree with those who thought that the continued discussion of this bill had done the Association harm, indeed he considered the discussion of it its legitimate business. He felt that it was wrong that that which had received so much of their attention should now be thrown aside without making a strenuous effort for its success. Ontario had a Medical Bill of her own, and so had Nova Scotia, and so Quebec, so that a graduate of the latter province was a graduate of Quebec alone, and had no right to practice in Ontario. He asked if after confederation that was the position in which a medical graduate should be placed. New Brunswick and Manitoba would doubtless soon have Bills of their own, so that before very long, we would have five Provinces with five distinct Bills, and the graduates of one Province not entitled to practice in any other. Every day proved the necessity of this bill and he hoped its discussion would take place.

The General Secretary Dr. DAVID, said he thought it was desirable, although they had spent three years in its consideration, not to proceed with it further. He had received letters from several prominent medical gentlemen in Ontario which showed that they would give a decided opposition to the bill. He considered it a waste of time, labour and money for them to go on with the discussion. He was of opinion that it was more than shameful that the medical men of this province should not be allowed to practice in the other portions of the Dominion. But still they would have to submit to the state of things until a general act was passed, which would remove this disability.

Dr. R. P. HOWARD remarked that when the bill was discussed in Ottawa there was a singular absence of representatives from Lower Canada. There were then only three or four French medical men from the Province of Quebec, present, and the Upper

Canada men, who were in attendance in large numbers expressed their opinions upon the bill. Now, however, as soon as the professional men of Quebec were about to proceed with the task, it was proposed to put off the discussion. He hoped that the present opportunity would not be lost by the assembly of giving an opinion upon the important subject before them. He moved that the chief features of the bill be discussed, and the grave question, as it had been rightly termed, decided, at least as far as the Province of Quebec was concerned.

Dr. C. C. HAMILTON, (Nova Scotia) advocated the discussion being entered upon, and the bill pressed forward as much as possible. It would be a much more difficult matter to have uniform medical legislation fifty years hence than it was to-day. It was only by perseverance any object could be obtained.

Dr. HOWARD pointed out that the bill had been modified to suit the wishes of Ontario, and now was nearly a counterpart of the law in that Province. He believed that they could settle the grave questions at issue in a very short time, and very much more easily than they could ten or twenty years hence.

The amendment was put and lost and the original motion carried, and the Association went into committee. Dr. Marsden, (Quebec,) presiding.

A discussion upon the first clause at once took place, when

The SECRETARY informed the meeting that the first three clauses had been passed a year ago, at one of the meetings of the Association. It was, however, decided to go over them again.

Dr. ROTTOT, (Montreal,) objected to the bill on the ground that it placed the control of the education of medical practitioners in the hands of the Federal Government. Therefore he moved that this Association, although desiring that the laws and regulations concerning the examination and registration of medical men should be uniform and similar in all the provinces of Canada, nevertheless reject the principle of the contemplated Medical Act, which puts the preliminary and medical education under the control of the Federal Government. He was in favor of laying down some basis of education and then leaving each Province to carry it out.

This motion was seconded by Dr. ——— and after some desultory discussion, was rejected by 17 to 11. The hour for adjournment having arrived the Association separated, to meet the following morning at ten o'clock.

THE DINNER.

In the evening the members of the medical profession of Montreal entertained the Association to a dinner, in the St. Lawrence Hall. About seventy medical men sat down. The dinner was served in the magnificent style for which the hotel is famous. The chair was occupied by Dr. William F. Scott, President of the College of Physicians and Surgeons of Quebec, having on his right the Mayor of Montreal, and on his left Dr. C. C. Hamilton, of Nova Scotia, the Vice chairs being filled by Drs. Peltier and Hingston. The usual loyal toasts were given, as

well as numerous volunteer toasts, and shortly after midnight the party broke up. Music was played during the evening by Gruenwald's splendid orchestra.

SECOND DAY.

Session opened at 10 a.m. Dr. Hamilton (N.S.) in the chair.

Dr. MARSDEN moved that the next place of meeting should be St. John, New Brunswick. By the time of the meeting they would have direct communication by steam and rail. New Brunswick would like it, and the Association had not yet met in the Eastern Provinces. He believed that their going there would be attended with very beneficial results, and promote the great cause they had in view. He believed that it would probably hasten the results that they all wished heartily to bring about, though they did not agree as to the details. It might be that they would then be able to mature their project for a medical bill which would be acceptable to the whole of the country.

Dr. HAMILTON, of Ontario, seconded the resolution.

Dr. HINGSTON expressed a hope that at the next meeting the greater part of the time would be devoted to the reading of papers on scientific subjects, and their discussion.

Dr. BOTSFORD (N.B.) said that he was very glad that the proposition had come from Dr. Marsden that the next place of meeting should be St. John, N.B. When he left St. John he was told to urge that city should be selected as the next place of the meeting. There was one advantage in the selection of St. John, that the weather was more cool than in the interior of the country, and they could offer as good accommodation as any part of the country, for the hotels there were equal to any other in the Dominion. By selecting the Maritime Provinces they would enjoy a pleasant trip, and would at the same time be able to attend to their business. In conclusion he stated that he could say on authority that by next year the communication would be direct either by steam or rail.

The resolution was then put and carried.

Dr. TRENHOLM stated that at the last meeting he had given notice of a motion to change the time of meeting. He believed that September was a very inconvenient month for the great majority of practitioners.

A good deal of discussion ensued upon this question, many expressing the view that it was impolitic to settle the time of meeting definitely, that it should depend to a certain extent upon the place of meeting. It was finally decided that next year the Association should meet the first Wednesday in August, and a notice of motion to change the time again next year was given.

The Nominating Committee submitted the following gentlemen to the Association for office-bearers for the ensuing year:—

Dr. James A. Grant, M.P., Ottawa, President.

Dr. McDonald, of Hamilton, Vice-President for the Province of Ontario.

Dr. W. Marsden, Vice-President for the Province of Quebec.

Dr. C. C. Hamilton, Vice-President for the Province of Nova Scotia.

Dr. Steves, Vice-President for the Province of New Brunswick.

Dr. Peltier, Montreal, General Secretary of the Association.

Dr. Berryman, Toronto, Secretary for Ontario.

Dr. H. Blanchet, Quebec, Secretary for Quebec.

Dr. Gordon, Halifax, Secretary for Nova Scotia.

Dr. Earle, St. John, Secretary for New Brunswick.

Dr. Robillard, Montreal, Treasurer.

PRIZE ESSAY COMMITTEE:

Drs. Hingston, Hodder, Wm. Bayard, Larue, Yates and A. P. Reed.

COMMITTEE ON MEDICAL EDUCATION:

Drs. Howard, Rottot, Worthington, James Sewell, Canuiff Ogden, Dickson, McGillivray, Botsford, Earle, Tupper and Parker.

COMMITTEE ON MEDICAL LITERATURE:

Drs. Black, Fenwick, Dagenais, Marsden, Larue, Bethune, McIntosh, Fulton, Oldright, Freeman, George Hamilton and Wickwire.

COMMITTEE ON NECROLOGY:

Drs. F. W. Campbell, Workman, Larue, DeWolf and Harding.

COMMITTEE ON PUBLICATIONS:

Drs. David, Robillard, F. W. Campbell, Trenholm, Dagenais, Hingston and Peltier.

AUDITING COMMITTEE:

Drs. Fenwick, Peltier and Scott.

J. B. BOTSFORD,
Chairman.

On motion the Report was adopted, and the gentlemen named were elected office-bearers of the Association for the ensuing year.

The PRESIDENT observed that, according to the fourth article of the Constitution, it was provided that the President and Vice-presidents should enter upon the functions of their respective offices at the beginning of the next Meeting, and the other officers immediately after election. He should give notice that at the next Meeting he would move to alter the Constitution so as to apply the same principle to the other officers as was now applied to the President and Vice-presidents.

DR. TRENHOLME then exhibited to the Association a number of new instruments, used in the treatment of diseases of females, which he had obtained in London, during the present summer.

THE MEDICAL BILL.

Dr. HOWARD said that, before asking the Society to consent to what he was about to do he would like

simply to state why. As they were aware, at last, by a final vote they ultimately got an expression of opinion from an influential portion of Lower Canada respecting the principle involved in the bill. After a good deal of debate and after much having been said upon the question, they at last got a formal motion from Dr. Rottot representing a very large and influential portion of the French Canadian influence in medicine in Lower Canada to the effect that as a whole they objected to the bill, and that they felt they could not go on with a bill which would be a Dominion Act. Whilst they were willing to have a bill for each Province they did not feel disposed to adopt the principle which would ultimately confer upon the Federal Government the jurisdiction in medical matters. That, of course, was what he was aiming at, and what they had been working to obtain for the last three years. It was evaded at Ottawa because there was not an attendance from this Province. It was postponed at Quebec because the amendments were not translated into French, and yesterday it was almost choked by a vote to suspend the discussion of the subject. Fortunately however, by the good taste of Dr. Rottot, the discussion was brought on, and subsequently a formal vote of eleven to seventeen, at a very small meeting, was obtained on the principle contained in the preamble. But the minority represented plainly the feelings entertained by a very influential portion of the French practitioners of Lower Canada. He, as a Lower Canadian, did not feel that it would be right in him to take any further active part in advocating a bill which was not acceptable to his compatriots here. It would be futile for them to go before the Local Legislature to obtain a bill which would not be acceptable to a large and influential portion of the profession. Having at last obtained an emphatic opinion from Lower Canada, he proposed, with the consent of the Association, as the chairman of the committee in charge of the bill, to withdraw its further discussion, and he requested permission for the committee, having reported, to be discharged. He hoped the Association would see the propriety of that proposal. As a Dominion bill, it could not be discussed at present, and therefore he hoped that it would be withdrawn. He need not say that it was a very great disappointment to him, but then there was nothing but disappointment in this world, in medicine as in other matters.

Dr. TRENHOLME seconded the resolution, but he did it with great regret, because he thought the French practitioners did not appreciate the position. No one more than he would like to see the whole of the Dominion thrown open to practitioners who might find that they could advance his interests by removing from one place to another. They might rest assured that they would never get the whole Dominion thrown open to them until they themselves accepted the principle of the bill. They could not get the one without accepting the other. If they desire to be able to practice their profession in any part of the Dominion from the Atlantic to the Pacific, they must consent that in the matter of medical education there should be uniformity throughout the whole Dominion.

Dr. HOWARD remarked that it would be more acceptable to him if some other gentleman seconded the resolution, because Dr. Trenholme was one of the gentlemen who, the previous day, had tried to choke discussion of the bill. Dr. Hingston had seconded his original motion, and perhaps he should have asked him to second this one; he would now do so.

Dr. HINGSTON said he would do so, not with pleasure, but with great pain. He would suggest that the discussion of the Bill should be held over for two years, by which time perhaps some of the angularities which at present existed might be smoothed over.

Dr. TRENHOLME wished to remove any impression of inconsistency in his conduct in offering to second Dr. Howard's resolution. His reason for trying to prevent discussion of the Bill the previous day, was because he saw that it could not be carried, and that to occupy the time of the Association with it was, in his opinion, wasting valuable time. He had not in the slightest degree changed his opinion as to the necessity which existed for a Bill such as was in the hands of members of the Association.

Dr. HOWARD said that while it was for the Association to decide whether the Bill should be entirely dropped or only postponed, he felt that he must retire from the position of chairman of the Bill Committee. He had many reasons for wishing to do so, but one very strong one was, that from his position of chairman, and his connection with one of the teaching bodies of the country, he felt that he had considerably impeded the progress of the Bill. If the Committee should be continued, he suggested the name of Dr. Craik should be substituted for his own.

Dr. ROTTOR observed that he was not opposed to the Bill *in toto*, but to some of its provisions. He hoped that Dr. Howard would still continue as chairman of the Committee.

Dr. ROUSSEAU (of Quebec), also hoped Dr. Howard would not retire.

Dr. HOWARD thought that as the Committee had reported that their work was accomplished, they should be discharged. The Bill was in the hands of the Association, and when wanted could be found with the Secretary. The recent Medical Bill passed in Nova Scotia was in a great measure the result of the labors of this Association. He therefore thought that those who had maintained that the time of the Association had been mis-spent in discussing this Bill, were mistaken. He thought that for the present it should be withdrawn, as the Province of Quebec, which was the only one in which there could be any very great difference of opinion, had emphatically spoken against the principle of the Bill.

Dr. C. C. HAMILTON, (Nova Scotia) moved that the further consideration of the Medical Bill prepared by the Committee at the request of the Association be deferred for two years.

Dr. ROUSSEAU, (Quebec) seconded the resolution, which was carried.

A motion by Dr. HOWARD, seconded by Dr. Gilbert

of Sherbrooke, to discharge the Bill Committee, was lost on a division.

A vote of thanks to Dr. Howard as chairman of the Bill Committee was carried by acclamation.

Dr. MARSDEN, announced that he had the pleasure of submitting an offer which must be very gratifying to the Association, as it would tend to make the next meeting of the Association very interesting. Dr. GRANT, M.P. (Ottawa), and Dr. Worthington (Sherbrooke), had offered to the Association a gold medal for the best Essay on the Zymotic diseases of Canada, the Essays to be submitted to the Essay Committee without signature, and with an appropriate motto, before the first day of July next; and to be presented to the next meeting of the Association.

This announcement was greeted with applause.

Dr. MARSDEN gave notice that at the next meeting he would move that in future the subscription to the Association be \$4.00.

PAPERS.

Dr. R. P. HOWARD read a paper detailing three cases of Scarlatinal Pleurisy, in two of which Paracentesis Thoracis was performed, and in the other nature spontaneously evacuated the pus, through one of the larger bronchial tubes. Two of the cases recovered, and the third died (one of the cases where the pus had been evacuated. The deductions drawn from the three cases was the advisability of performing Paracentesis early—say within the first week.

A vote of thanks having been awarded Dr. Howard, the Association adjourned for lunch.

AFTERNOON SESSION.

Dr. GRANT, the newly elected President, took the chair, when the Association assembled in the afternoon.

Dr. MARSDEN gave notice that at the next meeting he would move that the by-laws should be amended so as to enable the Association to strike off the roll of the members of the Association all permanent members that had been absent from three consecutive meetings and had failed to pay their subscriptions.

Dr. H. WRIGHT (Toronto), thought that the members from the Upper Provinces could not attend the meeting so long as they were held in the fall months of the year.

Dr. BOTSFORD thought it important for the welfare of the Association that the whole Dominion should take an interest in it, and that every possible step should be taken to secure this object. It would be a great pity if a large and influential section of the profession were to be shut out practically from attending the Association because of the time of meeting.

Dr. MARSDEN gave notice that he would move as the next meeting that the time for holding the meeting should be reconsidered.

Dr. HINGSTON then exhibited a case of double hair lip, upon whom he had operated several years previously. The method of operation was described,

and the instruments employed were exhibited. The Association was much interested.

Dr. G. E. FENWICK then read a paper upon stone, illustrated by 16 cases of operation. The method employed was the lateral, and every case was successful. The extracted stones were exhibited.

Dr. HINGSTON congratulated Dr. Fenwick upon his admirable success, not having had a single fatal case. It was gratifying to know that in Canada the statistics of this operation would compare with any part of the world, but the success of Dr. Fenwick, achieved through coolness and ability, was not by any means the average.

Dr. FENWICK extolled the lateral operation in Lithotomy, although he had seen it stated in a letter of Dr. Trenholme, published in the Canada Medical Record, that Sir Henry Thompson had stated that he had had 70 successive successful operations on children, which he considered due to the fact that he always used the straight staff.

Dr. MARSDEN thought that the successful result of Dr. Fenwick's operations showed that surgeons in this country could take their position alongside those of any other.

Dr. BOTSFORD expressed the opinion that stone in the bladder was a very rare disease in New Brunswick.

Dr. GRANT also remarked upon the extreme rarity of the disease in the Ottawa district.

Dr. HAMILTON believed that in Nova Scotia the disease was even more rare than it was in New Brunswick. In a practice of thirty-eight years he had never heard of a case.

Dr. FENWICK stated that the majority of his cases were from the City of Montreal.

Dr. GILBERT (Sherbrooke), stated that the disease was an exceedingly rare one in the Eastern Townships.

Dr. HINGSTON read a paper upon *Lithotripsy*.

Dr. MARSDEN did not think the disease was more frequent now than formerly, but that there were more skilful surgeons in the country. In olden times surgeons feared to perform the operation of Lithotomy, and not unfrequently allowed patients to wear themselves out by pain and suffering. Now, as soon as the disease was recognized, operative interference was at once recommended.

Votes of thanks to Drs. Fenwick and Hingston were put and carried.

Dr. HINGSTON observed that Drs. Howard, Fenwick and himself had prepared papers, not so much because of anything special they might contain, but in the hope of setting an example, so that, in coming years, others would imitate them, and bring valuable and interesting matter before the Association.

The following gentlemen were appointed a committee to examine and report upon prizes sent in to compete for the Gold Medal, Drs. David, Howard, Fenwick, Rottot and Peltier, all of Montreal.

The members of the Association resident in St. John were appointed a committee of arrangements for the next meeting.

Votes of thanks were passed to the different Rail-

way and Steamboat Companies, who granted members tickets at reduced rates.

The TREASURER reported a balance on hand of \$22.4, after paying all the expenses of the previous year.

Dr. HINGSTON suggested that the Association should adopt the course taken by the British Medical Association, and get members in future to open the scientific part of the meetings by addresses upon Surgery, Medicine and Midwifery these addresses not to occupy more than half an hour in delivering. If this was made a prominent feature of the Association, he felt certain that it would be productive of very great benefit.

The PRESIDENT said that if they were to be a working body, and desired to accomplish anything, the sooner they began work in earnest the better. They had spent five or six years in the discussion of the Medical Bill which had now been found useless. It would be very well if, for the next meeting in the Maritime Provinces, they had addresses upon a few of the more important departments of medicine. If they could get the co-operation of some of the members of the profession to obtain addresses upon Surgery, Surgical Pathology, Medicine, and Sanitary Science it would be very desirable, and add much to the interest of the proceedings of the Association.

Dr. F. W. CAMPBELL moved, seconded by Dr. G. E. Fenwick, that the following gentlemen be requested to give addresses at the next meeting at St. John, New Brunswick:—Medicine, Dr. R. P. Howard, Montreal; Surgery, Dr. Hingston, Montreal; Midwifery, Dr. Hodden, Toronto; Hygiene, Dr. Botsford, St. John, N.B.

Dr. HAMILTON suggested that a committee should be appointed to consider the amendments necessary in the Constitution and the By-laws, and report to the next meeting.

Dr. MARSDEN moved that the committee should consist of Dr. Hamilton, Dr. Gordon, and Dr. Botsford.

The resolution was seconded and carried.

Dr. HAMILTON proposed a vote of thanks to the medical gentlemen of Montreal for the very handsome manner in which they had entertained those who had visited them from a distance. He could say with a good deal of satisfaction that he had never met with so warm a reception as he had received on the present occasion, and he should remember it with very great pleasure in the future. Therefore he moved "That the thanks of the medical gentlemen from a distance be given to the medical gentlemen of Montreal for the handsome manner in which they have received them."

Dr. MARSDEN seconded the resolution, which was carried.

Dr. HINGSTON moved "That the thanks of the meeting be given to the officers of the Association for their services during the past year, and that the special thanks be given to the Secretary, Dr. David, for his services for the past three years. He added that although he knew that Dr. David must be glad to be relieved from his labours, he very deeply regretted his withdrawal from the post.

Dr. FENWICK seconded the resolution, bearing testimony to the value of Dr. David's services.

The resolution was carried unanimously.

A vote of thanks was also proposed to the Natural History Society for the use of their rooms.

The PRESIDENT, before putting the resolution, said that he wished to return to the Association his very sincere thanks for the honor they had conferred upon him in electing him their President. When he came to Montreal on the present occasion he had not the slightest idea that so great an honour would have devolved upon him, inasmuch as when he entered the room yesterday he saw the "household gods," as he might term them, of the profession assembled, and inasmuch as he knew that Montreal was the great metropolitan centre, as far as the profession of medicine was concerned, in the whole Dominion of Canada. He felt proud that a young country such as we had; young, it was true, but extensive as to territory, extending from the Atlantic to the Pacific, should have men who take a prominent part in the profession of medicine. He regretted that the honor had not devolved upon some individual who would have been better able to have performed the functions of President of so distinguished a body than himself. He felt, however, that, although young in years, he should endeavor to do the utmost he could in order to give the Society, as far as possible, a return for the confidence they had placed in him. He was exceedingly pleased that Dr. Hingston had thought fit to move in a direction, which he was satisfied would be materially conducive to the prosperity of the Association. He knew perfectly well that since the British Association was inaugurated, no department had taken a more prominent position than that in connection with medicine. They were well aware that they could only judge as to the advance in the various departments of medicine by the ideas brought out by the men who were leaders in their various departments, and which were admirably explained in the addresses delivered such as those given during the meeting at Birmingham. He was perfectly satisfied that by the addresses to be given next year, as specified in the resolution of Dr. F. W. Campbell, great good would be done not only to themselves as a body in this Dominion, not only in advancing the material interests of the Association, but at the same time in showing to their brethren on the other side of the line, that we were a progressive people, so far as the profession of medicine was concerned, and that in the Dominion of Canada we were determined to keep pace with the times. (Applause.) And more than that, their brethren on the other side of the Atlantic would feel proud to render them any assistance they could when called upon to co operate with them in the hope that the day was not far distant when they would not only be a united body throughout the length and breadth of the Dominion, but also in the United States and Great Britain, so that they might take the position their profession deserved from one end of the universe to the other. (Applause.)

The PRESIDENT then appointed Drs. Hingston, Mar-den, Campbell and Trenholme, Montreal, and

Dr. Hodder, of Toronto, a deputation to the American Medical Association.

Dr. HAMILTON suggested that the Association should petition Parliament in favor of establishing inebriate asylums.

Dr. MARSDEN thought that that was a subject which should be discussed at the beginning of a meeting, and not at the end of one.

The matter then dropped, and the Association closed its deliberations.

Progress of Medical Science.

DR. RICORD ON SYPHILIS.

(Meeting of the British Medical Association at Birmingham, August, 1872.)

In the Surgery Section a paper was read by Mr. Acton, M.R.C.S. Lond., on the Treatment of Syphilis.

The Chairman (Sir W. Fergusson) then introduced Dr. Ricord, of Paris, who received a hearty welcome from the meeting.

Dr. RICORD, after acknowledging the reception which had been accorded him, said he had not prepared an address, as he had not come with the intention of speaking; but Mr. Acton had caught him and obliged him to speak, which was a trick. (Laughter.) He had come to listen and to learn, but not to teach. However, he must say something, though there was no necessity for him to say much, as Mr. Acton had so nearly stated his views and his mode of treatment that there was very little for him to add. There was one great question in regard to syphilis, and it was this: could it be cured radically? In former times all venereal affections, no matter what, were considered as belonging to syphilis, and certainly there was then an immense number of radical cures by mercury or any other means. In this way swellings of the glands, soft chancres, even warts, and other things not belonging to syphilis, were easily enough cured, radically cured; and there were no after-consequences, no secondary symptoms. This explanation would account for the immensely large number of cases of (reputed) syphilis which used to be radically cured. But, since syphilis had been correctly diagnosed, the inquiry to which he had devoted a large part of his life was to see what belonged to syphilis, and what resembled it without belonging to it. There had been great differences in the results of treatment—so much so that a doubt, as Mr. Acton had said, had arisen whether real syphilis could be cured. That doubt as to the curability of syphilis was not recent; it was a doubt which old authors had expressed; and one particularly, with a curious name, which they would probably remember—"Mercurialis"—thought that now and then an armistice might probably be made with syphilis, but that there was no real cure. In fact, they frequently saw that a long time—months,—years—after the symptoms had been treated new symptoms appeared. And so the doubt whether syphilis could be radically cured, or whether the cure was only temporary, with

a prospect of the symptoms returning, might still remain; he (Ricord), however, had established the law of the unicuity of the diathesis of syphilis. The law of syphilis was the same as the law of small-pox, cow-pox, or measles. A man could have but one attack so long as the disease remained in the constitution—that was to say, according to his opinion a new attack could not take place while the system was still under the influence of the old diathesis. Well, it was exactly so with syphilis; as long as a patient was labouring under the diathesis of syphilis, another infection of syphilis could not occur—it was impossible. For instance, after indurated chancre, and the appearance of secondary symptoms, it was not possible for the patient to contract a new indurated chancre, with swelling of the glands, manifestation of skin disease, and so on. After one attack the patient could not have another infection as long as the influence of the first remained in his body; a second contagion could not take possession of the system at the same time. If, perchance, something of the kind took place, the symptoms would not follow the regular evolution. So, when a patient had constitutional syphilis, if a new chancre appeared to be hardened they would not find the glands swell, or the early manifestation of skin disease appear; and so of other symptoms. Superficial ulceration might take place, just as a spurious form of vaccination might arise on one who was still under the vaccine influence; but it was not a true case, it was not attended with the sequelæ. But if the constitutional disease were cured, if the syphilitic disposition were completely eradicated, then the patient would be able to contract a fresh indurated chancre, with all the subsequent symptoms. If this were the case—and he had observed it with great care, his experience dating back forty years—it proved that syphilis could be cured; and if syphilis could be eradicated, to ascertain whether a patient was cured or not when all the symptoms had disappeared there would be nothing else to do (though he knew that could not be done) but to try inoculation from an indurated chancre. If vaccination did not take, they were sure the vaccine disposition continued; if it did not continue, vaccination could take effect. In regard to syphilis, the proof had not been carried to this extent; but he had been able to observe that as long as the syphilitic influence continued, a patient could not contract an indurated chancre anew, and, that, consequently, if cured, a new infection might take place. This was a great point gained in science, and it proved what he had said, that syphilis could be radically cured. Now, as to the treatment of the disease. As he had told them, Mr. Acton's ideas were completely his ideas, explaining his manner for treatment and his practice. He would first speak of the treatment of the first stage—that was to say, the primary sore. As soon as he had ascertained that there was a hardened chancre, with a swelling of the glands—not inflammatory, because the glands in this case never suppurated,—he immediately instituted the mercurial treatment. There was one point on which there was some difference of opinion: many believed that it was impossible to prevent the accession of the second-

dary symptoms, the first manifestation of constitutional disease; many thought that no matter what treatment was employed the sequelæ would appear. Well, he had ascertained that if the treatment were soon begun and well carried through, the bursting out of the first secondary symptoms, the roseola, the swelling of the glands of the neck, etc., might be prevented. If this were not frequently the case it was because the treatment was resorted to too late, when the disease had had time to take root, and secondary symptoms were about to show themselves. In such cases it was not astonishing that secondary symptoms should appear, and the treatment ought not to be blamed; if the treatment were steadily continued they soon disappeared. But if the treatment were begun early, the observation of forty years gave him the assurance that secondary symptoms would not appear. When secondary symptoms had appeared the best treatment was, as Mr. Acton had said, mercury. If they wished for a perfect cure, this treatment must be continued. In general it was not persisted in long enough; it was dropped as soon as the symptoms disappeared, or a short time after, and then it was not astonishing to see them reappear. But if the treatment were continued five or six months, having regard at the same time to sustaining the constitution in general, relapses would be found to be infrequent. He observed very few cases of relapse, and there would not be many when the treatment was well kept up—when the patient had patience enough, and the physician sufficient courage. After six months of that treatment and no symptoms re-appearing, then the treatment with iodine must be begun, and continued for five or six months more. When a patient went to him, he said, "You will have a year's treatment—do you consent to that?" "Yes." Very well; we will go on. If not, good-bye." There were cases in which syphilis occurred in a healthy person—the only disease was syphilis. Then treatment was very easy—the case was a simple one; they had but one enemy to fight—all went on regularly. But, unhappily, in many instances syphilis was not alone; there was something else—scrofula, skin disease, scurvy, low constitution, poorness of the blood. They must understand that such complications as these altered the case; the treatment did not act so powerfully as it would do in the first case, as many of these complications were aggravated by the treatment. For instance, syphilis and scurvy might co-exist—and the characteristic of the latter was poorness of the blood, while that of the former was a plastic condition of the blood. Here, therefore, was a counteracting influence to the treatment for syphilis. Now one thing must be known, Perhaps he was speaking too long? (No; go on.) Well, in many instances syphilis became the secondary consideration, and they must begin with the constitution of the patient, as debility was the disease that required first treatment. They must attack the strongest enemy first. Syphilis was sometimes quiet, and stopped and waited till they came to it. So, when they had improved the constitution, they might commence with the treatment, and they must begin by treating the constitutional complication.

The best treatment was the proto-ioduret of mercury. The stomach bore this well in general. Sometimes it gave rise to a little diarrhoea, which was an easy thing to moderate; but when the stomach was not tolerant of the remedy, one capital treatment was that which Mr. Acton had told them he had confidence in—namely, rubbing-in. If this were not an unpleasant and disagreeable operation, certainly it would be in general about the best; he himself should prefer it. In rubbing-in, the action of the remedy was powerful and quick, and the stomach was not at all troubled with it. If it were not so disagreeable, and were a thing that could be done without being noticed, he should give it the preference. However, there were cases in which the skin was otherwise affected, in which there was a skin disease, and then friction could not be used. In a case of complication of syphilis and herpes rubbing-in could not be resorted to. In general, patients bore the iodide of potassium well, and in large doses. For his own part he frequently employed forty, sixty, eighty, even a hundred grains a day, and more. They must bear in mind that if they gave too small doses to some patients they would have no result; it was a remedy that passed through the body with great rapidity. He had great experience of it, and he had found that in half an hour it had passed away in the urine. Iodide of potassium was a sort of broom of the blood. So they saw that the methodical treatment was this: mercury, iodide of potassium. But only one for the first stage, and only the other for the later stage of syphilis? No, the rule was absolute that as long as there were secondary symptoms well marked, mercury must be given; when there was a mixture of secondary and tertiary symptoms, mercury and iodide; for tertiary symptoms, iodide. To treat some patients with iodide would not advance them in any way. Why? Because there was frequently in the constitution, in the blood, something of the second stage, something that required the mercurial treatment. This might not show itself, but when iodide of potassium ceased to do good, the disease remaining stationary, let them go back to mercury again, and they would have a splendid result where they had thought there was no further possibility of curing the patient. This was what Mr. Acton had said, and he was completely and absolutely of Mr. Acton's opinion. But there was another thing. When syphilis had lasted for a long time, and had a great effect on the constitution, it in some way disappeared, and left the patient with a complication existing that was not existing before. Sometimes a long course of treatment brought on a new disease—wasting of the constitution, poorness of blood. They must then stop all the specific treatment, and applying themselves to the principal symptom, restore the constitution by preparations of iron, bark, tonics, and proper food, so bringing the patient to the possibility of undergoing anew a regular methodical treatment, either by mercury or iodide, or a combination of these two remedies. In former times, when a person was thought to be syphilitic, physicians seemed unable to entertain any other idea than that of syphilis, and acted exclusively against a specific disease, neglected every-

thing else, and in that way they experienced all the bad effects and accidental symptoms which a bad administration of the symptoms would produce. Mr. Acton had spoken of the use of bromide of potassium. His views were exactly the same as Mr. Acton's with respect to the use of the remedies at different stages, the necessity of having regard to the complications that might exist, and of dropping the treatment for a while till the constitution was restored. This was regular and methodical, and his own manner of practice. But now, was bromide of potassium an antisyphilitic remedy? He did not believe that it was. He might be mistaken; but he had experimented with it in syphilitic symptoms, and without any apparent result. But it was a splendid remedy in complications of syphilis. In some cases of symptoms referable to the nervous centres, bromide of potassium was an adjunct, and came to the help of mercury or the treatment by iodine. In some cases of brain disease with syphilis, and of disease of the spine or epilepsy, bromide of potassium did wonders. So that they would see it was a remedy to be applied in nervous complications that might occur, but they must not depend on it as an anti-syphilitic remedy. Now, there were symptoms following syphilis which were not syphilitic, and these must not be treated with mercury or iodide of potassium. For instance, there might be necrosis. Well, they could not bring a dead bone back to life, no matter what quantity of mercury or iodide of potassium they might give. A physician must know these things, and he (Mr. Ricord) ought almost to apologise for bringing them forward. It should be observed that specific remedies did not always act specifically. Certainly, there was no specific effect without a specific cause, but specific causes did not always act specifically. So there were some effects of syphilis, such as disease of the bones, that would afterwards act as a common irritant. In syphilis there might be an ulcerated bone in the nose or mouth, bringing on suppuration; mercury or potassium would not remove that, but let the diseased bone be removed, and the patient was frequently cured. They must take note of all these conditions—the nature of syphilis, the manner in which it conducted itself, its action on the constitution. Let them particularly take note that the general law of syphilis was the same as the general law of small-pox, vaccine, and measles. If they were sure of this from what he had said and from their own experience, then they might be sure that syphilis could be perfectly, radically cured. They could tell their patients that, and give them courage and hope. If the patient had courage to go through with the treatment, and the physician had courage enough to stick to it, the patient might be radically cured. He thanked them for the reception they had given him; it reminded him a little of his hospital in Paris.

A question was asked whether Dr. Ricord was a believer in salivation.

Dr. Ricord replied—No, surely not. Salivation was an accident following the treatment, and it must be avoided as much as possible. There was but one case in which he approved of salivation, and that

was in disease of the eye—iritis. When this occurred and salivation was brought on, the inflammation of the iris subsided.

The Chairman conveyed the thanks of the meeting to Dr. Ricord, and observed that they must all feel obliged to the gentleman who put the question about salivation. It was very pleasing to himself to hear that the old-fashioned system of looking to salivation for everything did not hold a place in Dr. Ricord's mind.

Dr. Gross asked whether the soft chancre was capable of contaminating the constitution.

Dr. RICORD said his opinion was that a soft chancre, when accurately diagnosed, never gave rise to constitutional disease. This was a law as absolute as possible. But they must be careful, or errors of diagnosis might be made. It was not always easy to establish the difference between soft and hard chancre, but when the diagnosis was certain, they might be sure they would not have any constitutional disease after the soft chancre. On the contrary, even as long as six months after hard chancre secondary symptoms would appear. This was one of the most clearly established facts in practice. But the hardness of the chancre was not always well marked (*bien formulée*); it might be very superficial in those varieties that were attended with excoriation. When there was a something like parchment at the base, a chancre was very easily taken to be soft, but was not so; and he had had cases sent to him as instances of soft chancre which had been followed by secondary symptoms, but which were well characterised by the parchment-like base. However, there was a symptom of more value than the parchment base, a symptom that was one of the most important witnesses to constitutional affection, and that was the non-inflammation of the glands—they were cold and dull. In general several of them became enlarged; it was very seldom that only one was found to swell after hardened chancre; and not only were the glands swollen but the enlargement frequently occurred on both sides, in both groins. The enlargement of the glands was of much value as a characteristic of hardened chancre. The enlarged glands appeared very early, even during the first fortnight of the existence of the sore. With the soft chancre the glands did not always swell; in a great many cases there was no swelling. They would never find a real hard chancre without swelling of the glands; and they would also find many cases of soft chancre with swelling, these cases depending upon surgeons confounding the hard chancre with thickening dependent upon inflammatory infiltration of the tissue immediately around the sore. But if the glands should swell after soft chancre, it was probable that suppuration would come on. With hard chancre there was no inflammation and no suppuration. The older writers directed their efforts to cause an indurated sore to suppurate, in the belief arising from the practical observation that when a bubo suppurated there was no constitutional disease, and therefore they were under the belief that the poison was thrown out of the body. In their quaint way of

putting the fact, "they did not like to shut up the wolf within the fold." But they could not bring on specific suppuration in the case of indurated glands; it is impossible. He had tried all means of doing it, and could not succeed in the cases of specific suppuration. In the instances of soft chancre what had they to do—await the occurrence of suppuration, which might either be attended by simply inflammatory or specific bubo? With the soft chancre the inflammatory bubo appeared sometimes two, there, or four weeks after the occurrence of the chancre, and it had the characteristic pus of the soft chancre. There was such a difference between the hard and soft chancre that it was difficult to make a mistake. When a patient consulted him (M. Ricord) suffering from soft chancre he said to him, "Be quiet; you may have a bubo; that will suppurate, but your constitution will be unaffected; you will not be liable to secondary symptoms." With a hard chancre he could predict indurated glands, attended by constitutional symptoms, within six months, provided proper treatment were not followed. He would add, that when it was decided that the case was one of hard chancre or soft chancre, the treatment was very simple. When there was a doubt as to the nature of the chancre, he waited till some characteristic symptoms arose. But there were cases in which the existence of a soft chancre did not prevent a patient from contracting a hard chancre. The patient might have the two species at the same time, contracted from different sources. The two species, hard and soft chancres, do not depend upon the difference in the ground, but on a difference in the seed (*contagium*). So that the new comer who had relations with a woman suffering from the two species could take his choice. If the patient had a true indurated chancre and well diagnosed secondary symptoms, he might catch the soft chancre as often as he pleased, and it would be unattended with specific constitutional disturbance.*

Mr. LORD (London) asked Dr. Ricord what was his experience of municipal interference in respect to contagious diseases in Paris, and what was his opinion as to the effect of such interference in promoting immorality and degrading the character.

Dr. RICORD said it was surely a very good thing to have the women examined. It made the disease less frequent—no doubt of it. From what had already been done in France he saw that the same practice would be beneficial here. It was already a great thing that English sailors no longer brought the disease into France; the French would take care it did not return back into England, and that was a free exchange.—*Lancet*.

* Dr. Ricord has established a law on which he sets great value, and for the verification of which he thinks the present and future generations will owe him a debt of gratitude. It is that of having discovered and described the *unicity* of the syphilitic diathesis—in fact, subjecting syphilis to the law which is common to small-pox, cow-pox, measles, &c.—*Ed. L.*

ON THE ADMINISTRATION OF STIMULANTS IN FEVER.

BY DR. LIONEL S. BEALE, F.R.S., PHYSICIAN TO KING'S COLLEGE HOSPITAL.

Alcohol.—The mode of action of alcohol upon the organism during the febrile state is very complex, and before discussing the nature of the modifications in the pathological changes probably effected by it, it is necessary to refer to the great distinction between the two objects for which wine and other stimulants are given during illness. Alcohol is prescribed—1, For the purpose of promoting digestion, improving the appetite, and relieving unpleasant sensations about the stomach; and 2, With the view of directly influencing those most active and serious abnormal changes which are taking place in the blood and in the tissues in all bad forms of fever, which, if they progress beyond a certain degree, will certainly lead to a fatal result.

I propose to defer the consideration of this latter part of the subject until the action of alcohol in moderate doses in the healthy state and in cases of slight fever has been discussed. The forms in which this substance is taken are very numerous, and nothing is more remarkable than the capriciousness exhibited by different stomachs as regards the reception of alcohol. Some persons like and can take without suffering any form of alcohol. With others beer and malt liquors agree well—better than wine or spirits. A certain number can even take porter, but not ale, or *vice versâ*. With some dry sherry is the only wine that will agree. Port wine suits others; while not a few prefer, or can only take without suffering from derangement of the digestive organs, certain hocks or clarets, or sherry or cider. Brandy or whisky diluted will often agree when every other kind of alcoholic drink fails; but even pure rectified spirit properly diluted will not always be absorbed by the stomach without exciting discomfort and favouring the development of unpleasant gases, with certain organic acids, among which butyric, acetic, and valerianic are found.

No one has yet been able to give any satisfactory explanation of the fact that a little wine will occasion in some stomachs the greatest disturbance. Within a few minutes, not only is the process of digestion stopped, but there is pain, an unpleasant feeling of nausea, not unfrequently accompanied by an actual desire to vomit. In other persons a glass of wine will occasion no inconvenience at the time, but may lead, in the course of from twenty-four hours, to the development of that unpleasant collection of symptoms which constitutes what is often termed a "bilious attack." Vomiting, purgation, and free diuresis afford relief; but sometimes the disturbance lasts for days, and is not allayed until the stomach has had twenty-four hours' complete rest from work, or until free action of the alimentary canal and all the glands that pour their secretions into it has been promoted by a dose of mercury. It is, after all, not improbable that this most unpleasant action of alcohol indicates a highly sensitive but not unhealthy action of the nerves of the stomach, and that tolerance of wine and spirits is due to a change which

has been induced in the finest nerve fibres—in consequence of which their sensitiveness has been impaired. The tolerance of opium, tobacco, and some other poisons is probably to be explained in the same manner. Nor is tissue change limited to the nerves of the stomach; for it is an unquestionable fact that many of those persons who habitually subject their tissues to the influence of alcohol and tobacco, or both, at an early age, exhibit very distinctly signs of change in many tissues of the body. They look older; and indeed, physiologically speaking, their tissues are considerably older, and have deteriorated in a much greater degree, than would have been the case if they had not been exposed to the action of alcohol.

It is very remarkable how great a difference, as regards the capacity for the assimilation of alcohol, is observed in the same person when in ordinary good health, and when suffering from even a slight cold. I have observed this many times myself. When in health a very small quantity of wine will disagree, and not unfrequently give rise to a serious disturbance of digestion; but when one feels depressed and miserable from a feverish cold, three or four glasses of wine may be taken within a very short time with benefit, and with a feeling of immediate relief. Persons accustomed to alcohol in one form may take with advantage some other alcoholic fluid during illness.

If at the outset we have any reason to apprehend that an attack of fever is going to be severe, it is very desirable to administer small quantities of alcohol early in the disease. In this way the stomach may be accustomed to the remedy; whereas, if its use is postponed until the patient is very ill, and alcohol required in very large doses, the stomach is often in so highly irritable a state as to reject it. The patient's life may be in jeopardy from this circumstance, or fatal exhaustion alone may actually destroy him.

Of Giving Alcohol to Young Persons.—My conclusions as regards giving alcohol to the young are in the main not at variance with the opinions of those who advocate extreme temperance. My own experience leads me to believe that the majority of young healthy people would do well without alcohol; and I believe the habitual daily consumption by young persons—even of a moderate quantity—of wine or beer, is quite unnecessary, and mere waste, while in some instances it is positively injurious to health. At the same time, there can be no doubt that in certain cases where the health fails in children, and even in infants, great benefit results from giving small quantities of wine daily for a short time. Hard-working people, students, professional men, and people actively engaged have been advised to take stimulants, as a general rule—and some, no doubt, require them; but I believe many would enjoy very good health without any alcohol at all, while the recommendation that they should take plenty of claret or other light wine is bad advice for several reasons. Not only is a bottle of light wine not required, but in many cases it is actually injurious. That people who can get it will often take a bottle of light wine,

and more, is quite certain ; but that they require it, or that it is good for their health, will not bear discussion.

Up to the age of 40 very little stimulant is, as a general rule, really desirable for healthy persons, and I expect most people of average health would get on better without any. My own personal experience is this :—I was never very strong, though always able to get through a very considerable amount of physical exertion without suffering from fatigue. Up to the age of 40 I hardly ever touched stimulants of any kind, and when I did take a little I not unfrequently experienced an attack of sick headache before my ordinary condition of health was restored. Lately, however, I have found the advantage of half a tumbler of ale daily ; and I can bear half an ounce, and sometimes three or four ounces, of wine without suffering. I dare say, as I grow older, I may, like most persons, require a little more ; but when in the country, and taking plenty of exercise, I feel very well and contented without any stimulants whatever. The experience of some members of my family who have lived to be old, and that of many persons of whom I have inquired, accords with my own. In old age, I believe, stimulants are really necessary, and sometimes are even more important than food itself. I feel sure the life of many old people is prolonged by the judicious use of alcohol, and I think that some, who have been very careful all through life, take far too little stimulant when they grow old.

Of the Probable Action of Alcohol in the Body.—But we may now very briefly consider the influence of alcohol upon the organism, and its probable operation as an article of diet. What becomes of alcohol when it is taken into the stomach ? There is no doubt that if the spirit is strong when introduced, it is much diluted by the pouring out of fluid from the vessels and glands of the stomach, and that it is quickly absorbed, in its diluted state, into the blood. That this is so is proved by the familiar fact that the smell of alcohol is often very perceptible in the breath. Moreover, as is well known, alcohol has been detected by chemical tests in the breath, in the sweat, in the urine, and the other secretions by a number of observers. Alcohol has also been proved to exist in the blood. There is, therefore, no doubt that alcohol, as alcohol, may not only be taken up by the blood, but may circulate with the nutrient fluid, and eventually pass away from it unchanged. But it must not therefore be concluded that *all the alcohol every person takes* is thus absorbed as alcohol, caused to circulate through the body as alcohol, and at last excreted unchanged ; for such a conclusion would be opposed to the facts of observation and experiment. The truth seems to be, that some of the alcohol taken is unchanged in the system, but that a considerable and very varying proportion of the total quantity introduced is caused to disappear altogether as alcohol, and to pass through most important changes, escaping at last from the organism probably as carbonic acid and water.

A certain quantity of alcohol is *digested* and *assimilated* ; and it is quite certain that the capacity for the digestion of alcohol varies very remark-

ably in different individuals. It is most probable that the alcohol is taken up by, and carried with, the portal blood to the liver. It is then appropriated with other substances by the bioplasm of the hepatic cells, and completely changed. Its elements are rearranged, and added to the constituents which form the liver-cell, and which gradually break up to form the ingredients of bile, the liver-sugar, and the so-called amyloid matter.

It is the living matter of the yeast-cell that splits up to form alcohol and carbonic acid, water, and a form of cellulose. We shall not be surprised to find that another form of living matter—that of the liver-cell—has the power of appropriating alcohol, rearranging its elements, and causing them to combine with other elements to form compounds having properties very different from those of the materials out of which they were made. And it seems probable that under certain circumstances other forms of bioplasm of the body are able to take up and appropriate alcohol ; for it is certain that in some prolonged cases of exhausting disease a large amount of alcohol is readily assimilated, while ordinary foods can only be taken in such infinitesimal amount that we cannot attribute to them much influence in the maintenance of life. In severe cases of fever, as I shall again have occasion to state, the greater proportion of the alcohol introduced is probably not oxydised as used to be supposed, but appropriated. Its effect is to lower, not to elevate, the temperature ; and, so far from increasing the dyspnoea in bad cases of bronchitis, pneumonia, etc., by throwing increased work upon the lungs, as used to be affirmed, it has a directly contrary effect.

Dr. Parkes has shown that diluted alcohol, given daily in such proportions that not more than two ounces of absolute alcohol are consumed in the twenty-four hours, in most cases improves the appetite, and slightly quickens the heart's action ; but that larger amounts have an opposite effect as regards the appetite, and greatly increase the cardiac beats.

Anstie and Dupré showed that if doses of alcohol sufficiently large to produce narcotic effects are taken, alcohol escapes in the excretions, but when smaller quantities are taken it is not to be detected. This may be the true explanation of the fact that alcohol in certain cases cannot be detected in any of the secretions at all. It is certain that the quantity required to produce narcosis varies greatly in different individuals, and perhaps this may account for the different results obtained in the course of different experiments.

Dr. Dupré has quite recently proved that, of the alcohol taken in moderate doses (48 to 63 grammes of absolute alcohol), only a minute fraction is excreted as alcohol, while by far the larger proportion is disposed of in the system in some other manner. Dupré's observations show that this alcohol is not stored up in the system as alcohol, and slowly evolved in the form of alcohol. He remarks that the amount of alcohol eliminated per day does not increase with the continuance of the alcohol diet, and that, therefore, all the alcohol taken daily must

be disposed of daily, and converted into some other substance in the system.

We must therefore conclude that, of the alcohol taken, only a small but very variable amount is excreted as alcohol, but that the larger proportion, at least in the case of most organisms, is changed in the system; not simply acted upon by other things in a state of change, as may be effected out of the body, but actually taken up by the living matter or bioplasm, appropriated and converted into other substances. Though probably not applied to nutrition of tissues, its elements may perhaps assist to form some of the constituents of bile, sugar, fatty, and amyloid matter.—*Med. Times and Gazette.*

SUCCESSFUL LIGATION OF RIGHT CAROTID ARTERY FOR ANEURISM.

Dr. PIGNE-DUPUYTREN exhibited to the San Francisco Medical Society a patient on whom he had performed this operation. The aneurism being on the right side and so near the innominate artery, it became a nice point to decide where the ligature should be placed, that it should not be too near the innominate to prevent the formation of clot, or upon the diseased artery where a similar difficulty might arise. The ligature came away on the 17th day. In five months the tumour had entirely disappeared.—*Pacific Med. Journal*, Aug., 1872.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND.

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MONTREAL, OCTOBER, 1872.

THE CANADIAN MEDICAL ASSOCIATION.

The fifth Annual Meeting of this Association, which has just closed its session in Montreal, is noteworthy for two things, and, although the attendance of the Profession from the various provinces was small, still they were all represented, and considerable interest was manifested in the proceedings. The first thing worthy of note, as having occurred, was the abandonment by the Chairman of the Bill Committee of the proposed Dominion Medical Act, after an expression of opinion from the French Canadian members of the Association. When the time for the consideration of the Bill came round, an attempt was made, as will be seen by our report, to at once abandon the Bill, and thus prevent the time of the Association being occupied by its discussion. Those who made this move were doubtless actuated by the best of motives, but we think that the Association would

have made a mistake had they succeeded in carrying the motion proposed for that purpose. At Ottawa a large representation from the Province of Ontario fully expressed themselves upon the Bill: for instance, striking out the Branch Councils and substituting one large Central Examining Board. At Quebec, owing to the amendments which had been made at Ottawa not having been translated into French and embodied in the Bill, its discussion was postponed till the present meeting in Montreal, so that, to say the very least, the Association was bound, in all fairness to those gentlemen who had laboured so arduously upon the Bill Committee, to give time for an expression of opinion by the members in the Province of Quebec. The resolution to abandon the Bill was lost, and the meeting at once entered upon its discussion. The French speaking members of the Association freely stated their opinion, which was that, while approving of much in the Bill, they were opposed to handing over medical legislation to the Federal Government. A resolution to that effect was proposed by Dr. Rottot, an influential representative of our French Canadian brethren, and although it was lost by a small majority, still the expression of opinion was so universal and decided, that when the Association met the following morning, Dr. Howard, Chairman of the Committee who had charge of the Bill, asked leave to withdraw it. To this the Association would not consent, but, by unanimous agreement, its discussion was postponed for two years, the Bill still remaining in the hands of the same Committee. While we regret that the result is as stated, we cannot express surprise, for all must have seen that, with the French element opposed to the Bill, it was an impossibility to carry it through the Parliament of the Province of Quebec. This being the case, its abandonment, for the present at all events, was a necessity; still it would have been a great pity to have been forced to do so, without having given an opportunity to that section of our medical population who, up to the present meeting, have had no fair means of thoroughly understanding the proposed Act. The discussion was conducted with the best of taste and with the utmost good feeling, and we trust that, though the French and English members of the Profession differ at the present moment, upon this subject, the time is coming when such will not be the case—when the entire Profession of the Province will unite hand in hand, and press the measure to a successful termination. Our own opinion is that it only requires time to convince all of the desirability of a Dominion Act. The universality of Medicine shows that those who practice it should

not be confined by Provincial boundaries. The barriers which now surround each Province can only be removed by mutual concessions, and, in breaking these down, we hope the Province of Quebec will eventually take a prominent part. The object to be obtained—the right of all Canadian graduates to practice from the Atlantic to the Pacific—is one well worth sacrificing minor details for; that ail will see this before long we feel convinced.

The next thing worthy of making mention is the fact that no inconsiderable portion of the meeting was occupied by purely scientific papers and discussion, which gave to the present gathering an interest and a character which none of the preceding conventions have possessed. In this respect, several members of the Profession in Montreal set a good example in having papers prepared, which we have reason to believe will bear good fruit next year. The last session of the Association, held on the Friday afternoon, is admitted to have been exceedingly interesting, in a professional point of view, and its action in requesting addresses upon certain subjects at the next meeting from prominent members of the Profession—in this respect following the plan of the British Medical Association—will cause all to look forward with much pleasure to the Sixth Annual Convention, which takes place at St. John, New Brunswick, on the first Wednesday in August. Altogether, we consider that the Association has taken a new lease of life, and that the plans proposed, to give interest and *eclat* to its future meetings are such as must succeed, and we now call upon the Profession to give it their cordial support.

THE LATE DR. AGNEW OF TORONTO.

John Noble Agnew M. D., was born in Edinburgh, Scotland. He came to Canada when about two years of age with his parents, so that he was essentially a Canadian. His general education was acquired at the Grammar School, and for some time at Toronto University. He entered a theological school at Toronto, but after a short time, he altered his course, and commenced the study of medicine in Victoria College. Graduating in 1857, he commenced practice in the township of Pickering, but after two years he removed to Toronto where he found a larger field for the exercise of his professional skill, which was of no mean order. His talents and general attainments soon secured him a respectable position among the physicians of that city. He always took an active part in all matters pertaining to the interest of the profession, and to his zeal much of the success of the

medical section of the Canadian Institute was due, of which he was secretary for some time. Dr. Agnew's standing in the profession was sufficiently indicated by his election on two successive occasions to represent the county of York, including Toronto, in the Medical Council of Ontario, where he took an important part in all deliberations. He was appointed lecturer in Victoria Medical School in 1870, and lectured one session when he saw fit to retire. He held the post of School Trustee for two years, and took an active part in political matters, and was a thorough Canadian. During the last few months he had occasional attacks of fainting when he would become momentarily unconscious, and he felt premonitions of early death. His death took place suddenly, on the 15th August, in the 40th year of his age. A large number of the profession, and the general public testified their regard in following his remains to the grave.

PERSONAL.

Dr. Lucas, Gold Medallist, McGill College, Session 1869, obtained the M.R.C.S., Eng., in July last, as also Mr Robert S. Mutch, of Prince Edward Island.

Dr. Grant, M.P., of Ottawa, has been elected President of the Canadian Medical Association. We congratulate him upon this distinguished mark of respect, which the Association has bestowed upon him.

Dr. Marsden, of Quebec, who was elected one of the Vice-Presidents of the Association, was fully entitled to the honor, having been one of its founders and chief originators.

Dr. Russel, of Quebec, has returned from Europe.

TO OUR SUBSCRIBERS.

We beg to intimate that the subscription to the *Record* is only two dollars a year. We are induced to allude to this from the fact that three subscribers have remitted us three dollars each. In placing the *Record* at the low rate that we have our object has been to enable even the youngest member of the profession to subscribe for it. With a view to extending our circulation, (which is steadily increasing) we offer the following inducements:—

1. To any one forwarding us the names of five subscribers, with the money, we will furnish the *Record* one year *gratis*.

2. To any one forwarding the names of twenty subscribers and the money, we will furnish the *Record* one year *gratis*, and a copy of Smith's excellent new work on Diseases of Children.

Original Communications.

THE THERAPEUTIC VALUE OF ALCOHOL.

BY DR. W. E. BESSEY.—(Continued.)

If alcoholic medication could be shewn to lessen the mortality rate in fevers it would have much to recommend it; but, on the contrary, hospital statistics, wherever observations of the kind have been made prove the contrary.

The elaborate statistics of Dr. Gairdner, professor of physic in the University of Glasgow, published in the *Lancet*, 1864, shew that in several hundred cases (nearly 600) of all ages, the mortality lessened exactly as the dose of alcohol diminished, milk or buttermilk being the staple food. Wine, reduced from an average of 34 ozs. to 2½ oz., and spirits from 6 oz. to 2½ oz., was followed by a reduction of deaths, from seventeen to ten per cent.; while of 210 children under the age of fifteen, treated without any alcoholic stimulants, not one died, though the very same class of cases treated with alcohol in the Infirmary had a mortality of six per cent. Dr. Gairdner remarks upon this subject as follows: "The habitual use of drugs and stimulants has a great tendency to mask the disease, to disturb or retard the crisis, and to increase the mortality. This is an opinion formed after a most careful observation of particular cases, in detail, over many years. I venture to put it forward as a law, that, in a large proportion of cases, typhus fever, left to its natural course and treated without drugs or stimulants, will have its natural crisis before the twelfth day. Milk or buttermilk is, with me, the staple food in typhus. I know no other food that can be depended upon. To give wine, whiskey, and beef tea, while withholding milk, is simply, in my opinion, to destroy your patient; and the more wine or whisky you give while withholding milk, the more sure you will be to destroy your patient speedily, because you are thereby superseding the natural appetite (or what remains of it) for a nourishing and wholesome diet, by a diet, if it can be so called, which poisons the blood and checks the secretions and alters, for the worse, the whole tone of the nervous system, and of digestion and assimilation." The official account of the Russian epidemic of typhoid and relapsing fever states that quinine and stimulants had no effect, the deaths rising to forty per cent. Dr. Mussey, in his Prize Essay on the Physiological Action of Alcohol, says: "In the remission of the paroxysm of continued fever, there are probably but few physicians in our country, who have seen a large febrile practice during the last twenty-five years, who have not had

occasion to regret its unfavourable effects. Under the stimulant practice, trains of morbid symptoms are often aggravated and new centres of irritation established, which, if not sufficient to destroy the patient, prolong the period of fever, and frequently cause relapse, or a lingering convalescence." To this rule, however, there will be exceptions, as there is to every observation; for there will always be found exceptional cases in which because of peculiar idiosyncrasies in the patient, the most commonly received therapeutic aphorisms may be reversed, and we may meet with patients in whom alcoholics are well borne, and exert a temporary beneficial influence, but these are always the exception and never the rule.

Dr. J. B. Russell, of Glasgow, commenting upon the results of experiments with and without alcohol says: "Alcoholic stimulants are a two-edged sword in the hands of the practitioner," (agreeing with Dr. Anstie, he says,) "If employed within the range of their stimulant action they are helpful; if pushed beyond into their narcotic action, they impair the vitality, which it is our duty to augment." (This calls for the use of the sphygmograph to assist in determining when this point has been reached.) "Even as pure stimulants, he says, they may be used unnecessarily, so as to push and urge the labouring energies of the system, maintaining an unnatural excitement in a journey, which could, with leisure, have been more easily accomplished."

On this point, Professor Lehman observes: "When once the fact is admitted that the first thing in many diseases is to furnish a copious supply of oxygen to the blood, which has been loaded with imperfectly decomposed substances, and to remove as quickly as possible the carbonic acid which has accumulated in it, these observations will have afforded us true remedial agencies which exceed almost every other in the certainty of their action."

Dr. C. Murchison in a recent article in the *British Medical Journal*, after advocating cold water baths and quinine to lower the temperature, and aconite, digitalis and veratrum viride to reduce frequency of pulse—remarks that: "The nutrition of the body must be maintained by appropriate food as milk, beef tea, eggs, farinaceous articles, &c." With Graves he recommends feeding fever, but with Parkes he does not approve of over-feeding especially with pure nitrogenous diet, as beef tea. He thinks it doubtful if wasting nitrogenous tissue can be fed, in which case such food must be cast off by already over-tasked organs. *Milk he considers to be the best of all diet.* My own observations with beef tea, has

been that it aggravates, if it does not actually induce diarrhoea.

And on the use of stimulants he remarks as follows: "In many cases of fever it will be necessary to give stimulants. You must not give stimulants *simply because the patient has fever. Many patients with fever do better without them.* But you must not refrain from giving stimulants when the heart shows signs of weakness, as happens in the advanced stage of most protracted fevers," and recommends first *ammonia*, next *ether*, and lastly. (or as if a *dernier resort*) alcohol,—“in quantities proportionate to the weakness of the heart and pulse,” also cautioning against errors as follows: “You must take care that the remedial measures which you adopt in no way thwart the natural mode of recovery or favor the natural mode of death, which a too free use of alcoholic stimulants invariably does.

M. L'Ambert, in a recent article advocates the use of cold ablutions in fever, either in the form of cold water baths, or by the use of a cold wet sheet, as an anti-febrile, sedative, and soothing agent. He claims for them that they naturally lower the temperature, reduce the pulse from 8 to 30 beats, allay cerebral and nervous excitement, stimulate the secretory organs, and, in the exanthems, favor the appearance of the eruption.

Dr. Murchison also considers that cold and tepid sponging or cold affusions are remedies deserving further trial for reducing the frequency of the pulse and lowering the temperature in fever.

Coming back to hospital statistics: we have statistics of the London Hospital, extending over a series of years, which show a gradual advance in the rate of mortality in accordance with the gradual advance in the quantity of alcohol prescribed. From 1862 to 1864, the deaths rose from 7 to 10 per cent. In the surgical department, from 1854 to 1864, from 4.48 to 6.55, an increase in ten years of nearly one-third.

Statistics as published by Dr. Fraser regarding the employment of stimulants and the mortality in the London Hospital during the few years preceding 1865.

“In 1851, there were 4,051 in-patients in the London Hospital; that in 1857, there were 3,935 in-patients, and the mortality was greater in 1857 as 8 to 6.5 per cent., although £962 more were spent in 1857 than in 1851 for articles of luxury.

The summaries of these statistics stand thus:—

From 1854 to 1858, each *Physician* employed 12,803 ounces of wine annually; the deaths being 11.88 per cent. From 1860 to 1864, he employed 48,136 ounces; the deaths being 12.65 per cent.

During 1854 to 1858, each *Surgeon* employed annually 38,016 ounces of wine; the deaths being 4.48 per cent.

During 1860 to 1864, he employed annually 142,951 ounces; the deaths being 6.65 per cent.

In 1862, the general mortality of the hospital was 7.4 per cent.; the consumption of stimulants being 1,281 gallons of wine, 162 brandy, 38 gin.

In 1864 the mortality was 10.5 per cent.; the quantity of stimulants consumed being 1,558 gallons of wine, 359, of brandy, and 62 of gin.

Dr. Fraser remarks the steady rise in the mortality rate coincident with a steady increase of the use of alcoholic stimulants, and goes on to make the following pertinent observations:

“Well knowing the fallacies so often edited through an erroneous interpretation of statistics, we do not pretend to connect the increase of deaths with the increase of stimulants consumed. But, when we reflect upon our modern advancement in medicine and surgery (especially as mis-called ‘Conservative’)—when we think of our great modern hygienic efforts,—*we may fairly ask for some explanation of the fact of a general advance in the mortality of a London Hospital.*”—Dr. Fraser, in *British Medical Journal*, Dec. 9th, 1865.

On the other hand, the treatment of particular diseases without spirits, or with vastly reduced quantities, has been, without exception, followed by a largely lessened mortality. This has been true in the case of cholera, rheumatic fever, typhus and typhoid fevers. Vol. II, third series of Guy's Hospital reports, contains a report of thirty-six cases of rheumatic fever, treated for the most part with simple diet and mint water, by Sir W. Gull, M.D., and H. Sutton, M.D.

On the reading of a paper, in 1862, before the London Medical and Chirurgical Society, by Dr. Dickenson, on the treatment of acute rheumatism, considered with regard to the liability to affections of the heart under different remedies, Dr. (now) Sir W. Gull, observed that in his hands the alkaline treatment had proved a failure. “He had used colchicum, Dover's powder, nitrate of potash, opium, &c., without satisfactory results, and was therefore content to keep the patient quietly in bed, so as to avoid disturbing causes, and to support him on the simplest diet, giving him a mixture to please and satisfy him, and lead him to believe that something was being done, and he usually gave them a little extract of *Taraxacum* mixed with peppermint water. Amongst 64 cases so treated he had scarcely had a case of heart disease.” Dr. Wilks and Dr. Rees, of Guy's Hospital, have also treated rheumatic fever exclusively without drugs and stimulants, and instead of the common frightful sequel of heart disease it has been cured in half the usual time, and with less than one per cent. of that malady. Hence if the frightful sequel, heart disease, is favored by alcoholic stimulants then surely this is another of those disorders (one of retained effete matters in the blood), in which alcohol.

hol is contra indicated. The *Medical Times*, commenting on the Guy's Hospital Reports of 1866, says: "Two of the most important papers, are by Dr. Rees and Dr. Sutton, who have recorded cases of rheumatic fever, complicated and simple, *treated without active medicines*. We say 'treated' because we hold that rest, a regulated diet, temperature, &c., are no mean aids to recovery in acute diseases."

While on fevers I may quote Dr. Wilks' remarks in *Lancet*, 1865: "At the present time there are advocates for a universal method in favor of alcohol in all cases of fever. In my intercourse with medical men, I judge that very many are scarcely alive to the fact that typhus fever is very rarely fatal in young persons, and therefore that they are apt to attribute recovery to their medicine. Young persons always do well if let alone; (this opinion is also put forward by Dr. Beale in a recent paper) of this fact I could quote a larger number of cases in proof; and on the contrary the few instances which I have seen end fatally have been those *in which a large amount of stimulants have been given* from the commencement of the disease, and, what is perhaps even more to the point, the withdrawal of stimulus in some cases where it was adopted as the method of treatment has been attended with the most decided advantage." The late Dr. Bentley Todd is responsible, more than any other, in recent times for the stimulating doctrine, and Dr. A. W. Barclay, in his work "Medical Errors," points out the fact that the mortality rate in Dr. Todd's own practice in rheumatic fever was always very large: that of 18 cases reported 15 were complicated with heart disease, while in common continued fever eleven deaths occurred among 24 of Dr. Todd's cases. Gastric fever, or rather, the gastric form of typhoid fever in which the local parts affected are the mucous follicles and glands of the stomach, is another of those peculiar phases of low continued or paludal fever, in which alcoholic stimulants are not well borne, and prove prejudicial and not beneficial. And it will be within the recollection of many how rapidly, under this stimulating plan of treatment, the Prince Consort sank, furnishing an illustration of a patient, who it is possible may have been "stimulated (as Dr. Ainslie remarks) off the face of the earth."

The fact that medical opinion has been rapidly undergoing a profound change on the subject of alcoholic medication, in the mother country, is patent to any one who watches closely the opinions put forth in medical reviews, hospital reports, &c., and such comments as the following, by a leading journal like the *British Medical Journal*, so long ago as June, 1868, is sufficient to shew in what direction medical opinion has been drifting for the past few years in England.

In reporting a lecture by Dr. Gardner, of Glasgow, on the limits of alcoholic stimulation in acute diseases, i says: "The author condemned the practice, and also the theoretical views leading to the practice of the late Dr. Todd, and continues: "It is nearly as possible a demonstrated fact, that much of what is spent in wine and spirits for the sick in hospitals, and, therefore, probably in private practice, is unnecessarily, if not injuriously, spent."

(To be concluded in our next.)

INTRODUCTORY LECTURE TO THE FORTIETH SESSION OF THE UNIVERSITY OF MCGILL COLLEGE.

DELIVERED 1ST. OCTOBER 1872, BY THE REV. WILLIAM WRIGHT, M. D., Professor of Materia Medica.

(Reported for the *Canada Medical Record*.)

GENTLEMEN,—I thank you for your warm greeting, and in acknowledging it, let me assure you that the joy of meeting is mutual. Your Professors are as happy as you are at the introduction now taking place on this the first day of the Session. And in return for your applause which we accept as your welcome, I have great pleasure, in their name, in extending to you a most cordial welcome. This day begins a future which we trust will enrich you with an abundant harvest of professional usefulness, and when a little while has rolled by we hope to place in your hands the sickle by which its golden fruit may be gathered into your garner: or to change the figure, we trust that before a long while we shall find you round our necks with other esteemed jewels in the long race of graduates who are our sons in medicine. May the morning you first crossed these halls of learning be ever a red letter one in your life's calendar; may enthusiasm so swell at the remembrance of the time spent here that you will be eager to exclaim: "We hail from McGill." And may others read the great fact in your superiority, so that they too will be constrained to confess that from McGill, and McGill only, could you hail. This day, again, will ever appeal to our hearts because it marks a new era in our position. We now inaugurate the stately building wherein we are met. It has been built by the Governors of the University out of the funds at their disposal, at a cost of \$27,000. They have placed it exclusively as a free gift in the hands of the Medical Faculty. Long will the memory of their liberality be green. Whenever we look round, we read in every part of the substantial structure their good will towards us, and the munificent scale by which our wants should be met. "*Si videres monumentum, circumspice*." As part of the College buildings, it forms a handsome wing being where medicine should always be conspicuous in the company of the learned. No more healthy, no more picturesque site could have been chosen.

The lecturer then entered into a minute description of the building, which we omit, as we allude to it in our editorial columns. The lecturer then said : —

"Medicine was a mere chaos till 600 years before the Christian era, or a little earlier. Then the attempt was made to bring it into cosmos, or under the comprehension of philosophy. The asclepiades were the true originators of science, and in helping on the work Pythagoras was famous. Eight hundred more years passed by, however, before medicine was so digested or so trimmed as to be able to be publicly taught in a systematic manner. Then the philosophical school, or sect, which had in the meanwhile flourished, was superseded by the empirical, under the guidance of Serapion and others. And when the third century dawned, there sprung up the first institution for medical education. It was founded at Jondisabour. It brought up many eminent men, among others, some centuries after, was Rhazes, the Prince of physicians. But its teachings were soon opposed by those of the methodics, and afterwards by the dogmatics and others. For of it, as of others, it is true—"*Nec saire fas est omnia*. The attendance upon some of the ancient colleges far exceeded that of any single one in modern times; perhaps from their being not so many then as now to divide the palm. That of Bagdad, with which was associated an infirmary and laboratories, numbered as many as 6,000 students at one session in the latter part of the 8th century. In the 11th century one of the most celebrated was the university of Salerno. Its medical lectures were very numerous attended during the Crusades, the place being then a fashionable resort. It awarded its degrees to students of seven years' standing. I shall not steep you in the Cimmerian gloom which rested upon later endeavors to diffuse professional learning, as it rested upon whatever else was calculated to ennoble mankind, till the middle of the 15th century; nor, pleasant though the task may be, trace the establishment throughout Europe in the sunshine that succeeded, medical schools, which still continue to win the admiration of the whole world; but I propose to engage in what I trust will be to you still more agreeable. I propose to turn your attention from foreign seats of learning and bygone days to our own. For as the patriot and his country, so of the Alumnus and his college, it may be sung—

"Such is the 'Alumnus' boast where'er we roam
His first best college ever is at home."

Before 1824, a few occasional lectures had been given in Montreal, but without the order or regularity or union that was afterwards manifested. In

that year four of the most competent practitioners resident here, viz., Drs. Caldwell, Robertson, Stephenson and Holmes, associated themselves to deliver annually courses of lectures upon certain branches of medicine. The school thus initiated was conducted with signal ability from the first. Many were its early struggles; but the wisdom and energy of its brave founders triumphed over all. It was named "The Montreal Medical Institute." Its pupils had the advantage of walking the General Hospital, which had been opened two years previously. Its powers were limited, however, to those of extra-academical bodies. This institution is of peculiar interest to us. It was the child of the man of which the present one is father. Four years ended its nonage, when it was grafted as a flourishing scion into the University of McGill College, of which it afterwards constituted the medical department. It now had the privilege of procuring for successful competitors the *summos honores* in the form of the degree of M.D. Its first graduate was William Logie, in 1833; he was the harbinger bud of the wreaths of flowers which blossomed in succeeding springs. Its usefulness was greatly promoted by the foundation of a library and museum, which its Faculty made more extensive year by year. It began with four chairs, viz., Practice of Medicine, Midwifery, Chemistry and Materia Medica, Anatomy and Surgery. With the exception of a suspension during the rebellion which broke out in 1837, the lectures were delivered unremittingly every year. The last two branches named were subsequently divided, so that Chemistry, Anatomy, and Materia Medica, were taught separately. Surgery, however, was only released from its old bone to be joined to a new one, midwifery. In 1842 the union was severed, and each consigned to its own guardian. In November of the following year the efficiency of the school was materially increased by the opening of the University Lying-in Hospital, which afforded students the opportunity of attending cases of labour.

Since the origin of this Faculty to this, the 40th year of its existence, it has enlisted 26 Lecturers or Professors, including its founders. Upon 14 of these honored men Time has executed his commission.

"He undermines the stately tower,
Uproots the tree and snaps the flower,
And sweeps from our distracted breast
The friends we loved—the friends that blest."

The last we have had to mourn the loss of has been Dr. Fraser, and because the last I feel that no apology from me is needed while paying a short tribute to his memory, that it may be the more surely preserved among us.

William Fraser was born in Perth, Scotland, I believe in the year 1814. After having completed his general education, he entered upon the study of Medicine,—which he pursued chiefly in Glasgow, attending lectures both at the University of Glasgow, and also at the Andersonian University. He was remarkable for the ardor, industry and perseverance he displayed in attaining a knowledge of his profession. His tenacity of application and constancy in learning were such as if he had “set his life upon a cast” and was resolved that by no fault nor short-coming of his, should there be any hazard of the die.

Upon the outbreak of cholera at Rosneath, in 1832, he was sent down to the parish by the late Dr. Lawrie, his Professor of Surgery, to officiate in a temporary infirmary opened for cases of the Epidemic then raging. I mention this incident because it shews the high opinion entertained of him, at that early time judging him worthy to be trusted with a post of responsibility. And I mention it for another reason. Rosneath is the native place of our Dean, and there he made his acquaintance. As they then grasped their right hand of fellowship for the first time neither one nor other had a glimpse of the brilliant future that awaited them in a far-off land across a thousand miles wide bridge of sea, where they were to be colleagues for more than a quarter of a century, to supply the wants of the Dominion and parts which far outlie her borders with troop upon troop of skilful and accomplished practitioners.

In 1834, young Fraser received the license of the Faculty of Physicians and Surgeons, Glasgow, which is a double qualification, the same as the Medical degree of our University. It entitles the holder to the position with all the privileges of a general practitioner, in that city, so that with it he can there practice Physic, Surgery, Midwifery. Fraser, however, used it more as an honor than a power. Having heard of Canada, where “worth by poverty depressed” rises not so slow as in the Mother-Country, he left home and came out here. Soon after his arrival in this city he was made Apothecary or House-Surgeon of the General Hospital, or rather both, for in those days the offices were fused together and held by one person.

While gathering experience of disease in its protean forms in this new situation, he decided upon extending his theoretical acquirements by re-attendance upon lectures. With this view he matriculated in this University, followed the courses and, having qualified, graduated in 1836.

The graduation class of that year contained another member of high distinction, I mean Dr. Wm.

Sutherland, our Emeritus professor of Chemistry. Dr. Fraser seemed to be so drawn towards him, that an intimacy sprang up which time served to brighten; the tendrils of his heart being ever ready to cluster round the charms of a social, manly, philosophic nature. And whenever memory recounts the pleasures of a bye-gone oratory, that fell in brilliant gleams upon admiring pupils, or a physician to whom the hearts of his sick were gratefully knit in warm affection, or a friend who tenderly felt for another's smart, and could cheer the lonely way with his winsome words, then will it recount some of the graces of a Sutherland!

Having obtained license to practice in Lower Canada, which is got by proving ownership to one's degree, Dr. Fraser gave up the Hospital and engaged in private practice. He realized the fond dreams of hope, and from a slender perch climbed up to an uppermost branch to rejoice in all the pleasures which first-class success could yield. Ever ready to heed the call of the sick, to act upon the rule “*labor omnia vincit*,” and to do the best for his patients, he took at the flood the tide in his affairs which led on to fortune, and after 36 years toil, he was worth £40,000 or £50,000.

In 1845 he was chosen to fill the chair of Medical Jurisprudence. I had the benefit of his maiden course, together with your able Professor of Medicine, and four others whom I can recall. It was new and not obligatory retrospectively, and for these reasons, the attendance was so thin. Here he gave the first marks of aptness for lecturing that after years only rendered more prominent. I well remember the zeal with which he threw himself into his work, the pains-taking he exhibited in its discharge and the faithfulness with which he carried it through to a satisfactory close. His aim was to afford his class a clear, curt, well digested view of his subject, abreast with the progress of the day.

In 1847 he was elected by the board of Governors, one of the Medical staff of the Hospital. Though that year was a very busy one for doctors, owing to the spread of an extensive epidemic of typhus or ship fever imported by emigrants who had suffered from famine, consequent upon the failure of the potato crop in Ireland, Dr. Fraser showed himself equal to the emergency. In other outbreaks, as those of cholera, in 1849, and afterwards, he was also always under arms, and effective in the path of duty. His patients had great confidence in his wisdom, and his humane treatment won their esteem. He was fond of surgery, and as an operator was daring, bold and resolute; he was also fond of trying

new remedies, in order to determine their real merit, or ascertain some new point in their action.

In 1849, yielding to the wish of the Faculty, he was translated to the lectureship of Institutes of Medicine, which he filled during the 23 years following. He there displayed the characters that were so marked in his former post, but more developed by the training he had there received. Thousands of students have borne away his teachings, and with their deep science have drunk in the spirit of enquiry they caught from him, and profited by the example of diligence he set before them.

Dr. Fraser had a lofty idea of the dignity of Medicine. He was a stern foe to empiricism under every guise, and a strong upholder of Rational Medicine. To his mind its pillars were physiology and pathology, or they were the streams through which the fountain was to be supplied. Partiality, however, did not close his eyes to the inestimable value of Clinical study. He was a useful member of the several Medico-Chirurgical societies that rose and sank during his career, and occasionally contributed original articles to the local journals. The first was in the Montreal Medical Gazette, for May, 1844, about "a case of ovarian tumor." In the same journal will be found his account of a case of castration, and of one of spasmodic croup. In the British American Journal, he published two papers, one on erysipelas, treated by Venesection, and another entitled: "Observations on fever prevalent among immigrants." In the Medical Chronicle, he wrote upon "Galvanism in paralysis of the bladder;" "Amputation of the forearm;" "Strychnine in Cholera," and "Perineal section in stricture of the urethra." In this journal and in those that succeeded it, several Hospital cases are reported under his name, treated by him, but written by others who had watched them.

For several years, Dr. Fraser was a Governor of the College of Physicians and Surgeons, Canada East, and of the Natural History Society of this city.

And here the sable line must end this rude sketch. His long life of activity having been embittered by prostatic hypertrophy for some time; at length urinary infiltration set in; and in a few days more, on the 24th of last July, he was removed from among us

"To that mysterious realm where each shall take
"His chamber in the silent halls of death."

"until the day break and the shadows flee away."

We deeply deplore the breach made in our ranks. We have done what seems to us best towards its repair. The admirable way in which

your new Professor of Institutes managed his former offices flatters us with the florid hope that you will soon realize his appointment to have been the best that could have been made. The blank he has left, in turn, Dr. Ross, a gold-medallist, fills. He brings with him the clinical experience he gained during the years he was in the Hospital, where he won for himself garlands of praise.

A feature of this school is she does not forget her students, nor pass them over for strangers. Her chairs are her highest prizes, and when her own can fill them she glories with maternal pride in drawing them still closer to her bosom. Of her eleven professors eight have been her offspring. And these eight have sat at the feet of one whom they still thank for his invaluable lessons. That one is the acknowledged Nestor of Canadian medicine, beyond whose professional opinion there is no appeal; but to them he is far more. He is as a fond father whom they dearly love, a sincere and faithful friend in whom they delight, and while he is there that one is also the one whom they esteem as their dean.

As motion causes heat, heat light and chemical action, chemical force electricity and magnetism, so in the progress of this School several other Schools have started up,—or rather I should say as life-force by acting on matter, brings out these cosmical forces, so our existence has been followed by the birth of others. That is what I should have said, for life-force has its origin from no other force, nor into it can any other be turned, nor can it be merged into any other, and that is just the case with this school. It owes its start to no other in the Dominion; no other can take its place; and it has lost nothing by developments; on the contrary "*Crescit crescendo.*"

The relation of Medical Schools to Universities, is in this country unlike what it is in the great model institutions of the British Isles. There, there are few Universities and many Schools. Here every School is part of a separate University. I do not object to many Schools. I would always rejoice to find many were needed, and would gladly welcome the efficient; but I hold, and very strongly too, that nothing is more calculated to make them engines of destruction than to constitute each one a Faculty of a distinct University. Legislation could not inflict upon a people a greater evil than to multiply bodies having unlimited power to grant degrees to whom they please, and as they please, without hindrance or supervision where, as in Canada East, these degrees procure for their holders a license to practice without further examination, however great may

be the measure of their incompetence. Through its University each Medical School has this unlimited power, and having it there is to be apprehended the liability that the maintenance it could not expect because of its sterling worth or established reputation it will seek to acquire through the lavish exercise of the power unwisely placed in its hands; especially is this to be expected when competition springs up late in the day. Look now at the appalling consequences of such an evil once perpetrated. Look at them as they are to be seen in its ultimate working. Were they but the boasts of the gourd against the oak of a century's root, of a thing that must wither at the end of its summer's birth, against what is to live on in full vigor, of the swellings of voices over their masters—were they these, there would be nothing worth notice; but unhappily, the gourd, while it lasts, has the power to plant the flag that means an easy time with M.D., sure, and to make good these offers. And, while it lasts, such a School may shew its disregard or sacrifice of the health or happiness, or life of the public by periodical drains of incompetent physicians whom it sends out to deal with these essentials upon which the security and prosperity of a country necessarily depend.

What you want in a respectable Medical School is firstly, that it shall have abundant opportunities for imparting a practical acquaintance with diseases and injuries, through actual observation and clinical teaching. For this an Hospital is indispensable. In the Mother-land it is the Hospital originates the School; the School is the School of the Hospital, and from it gets its worth. There no eminent men would presume to teach medicine who were destitute of the resources of an Hospital.

What, again, you want in a useful Medical School is an extensive library, where the periodical literature of different places may be referred to, where the classics of the profession may be consulted, where there is some thousands of volumes of standard books, and where the works last issued are annually added.

What you want further in a reliable School is that it should be thoroughly equipped in means of illustration. It ought to have a museum largely stocked with both anatomical and pathological preparations; the latter to be so varied as to comprise with the more common, the rarer lesions; in short such a display as can only be acquired gradually, after tens of years of collection. And in addition to these there should be as many series of the best executed plates or drawings, as well as such varied

objects or models, or instruments as are generally serviceable.

As you pursue your studies you will find them very entertaining; you will find our abode is in a crust twenty-three miles thick, the cooled scum of molten blazing rock beneath, one hundred and sixty times hotter than red-hot iron, our life a vortex of change kept up by tearing from milk or flesh, or fruits, the atoms of our anatomy to make good the piece-meal wear of what we once called ourselves; you will find that we are kept warm by our unlocking the sunshine from the cellars of food or fuel, in which it has been stored, after it has ridden upon its beam through space that would take a railway train two hundred and thirty years to cross; and that we are ever in motion, travelling with the earth with a speed sixty-eight times as great as that of the bullet fired from a rifle. Your studies will also fill you with interest as they shew you how wonderfully you are made, as they lead you stage by stage through the work of building the human frame, from the time of the fertilized ovum cradled in the Graffian vesicle onwards; as they point out the outlay of myriads of nerves, of vessels, blue, red, white, and colorless, meandering in leashes over mountain-like organs, valley-like dips and plain-like surfaces. They trace the finger of design, give every measure down to the 400th part of a line, and tell of every function.

Medicine, however, chiefly commends itself because of its utility. It points out the laws of health, how to stamp out the decimating plague, to cause the air or water of a town to be pure, and to promote the salubrity of its people. It takes you on the wings of contagion to its strongholds, shields from its venom, tracks it in its progress, and fits you to enter the lists against it, sure of victory. It gives you power over the ills to which flesh is heir. It takes you where Flora spreads her treasure, and down the mines of the earth, and into the noisy shop of the factor, and many a place besides to cull remedies. It learns you what they can do, when to use them and how to give them. It speaks of the insane root that takes the reason prisoner, of Keksie, or Conium, that killed Socrates; of the finger of Hermes which is the anima articulorum of the Masch Allah or "Gift of God," that first provokes pleasure, then lulls to rest; of one that in fractional parts arches back the body into the rigid locks of death; of another that relaxes every part, and of very many more. It arms you with the Surgeon's skill and strength where the question is what has been the injury, when the cry for relief is importunate, and

when, if the right aid be not afforded the case must be lost. It enables you to staunch life's current in its wasteful flow; to rid the air-pipe of the struggler for breath from its foreign body; and in countless other ways to prove the friend of distressed humanity.

Marvel not that such a science, such an art, should be richly strewed with enconiums. Let me read you two or three. One of the oldest says: "Honor a physician with the honor due unto him." "The skill of the physician shall lift up his head, and in the sight of great men he shall be in admiration." "Give place to the physician; let him not go from thee, for thou hast need of him." Among the Romans, Cicero was exuberant in his praises of the profession. According to him "nothing brings man nearer to the Gods than in giving health to his fellow creatures." And in more modern times Dr. Johnson, the leviathan of English literature, thus beautifully records the memory of a practitioner.

"When fainting nature call'd for aid
 "And hovering death prepared the blow,
 "His vigorous remedy displayed
 "The power of art without the show,
 "In misery's darkest cavern known
 "His useful care was ever nigh
 "Where hopeless anguish pour'd his grain
 "And lonely want retired to die."

These are a few of the inducements that prevail to urge you to attain to the object before you. The path is made easy in proportion to the thoroughness of your previous education. Where that has been liberal it the best preparation to future study. The higher the preliminary training the more easily will you acquire your professional learning, and the more surely will it be remembered. When possible a Collegiate course in arts should be added to the instruction of the Grammar and High School. The benefit conferred is not merely the grasp of a larger fund of knowledge, but also the better culture of the mental faculties, whereby knowledge will be more efficiently apprehended, retained, and turned to profit. The tentacula by which it is secured will be more expanded, effective and polished. Graduates in arts should, therefore, be able to acquire the profession sooner than others, and upon the belief that such is the case they are granted the benefit of one year off from the four, which in other cases must be spent in the study of medicine. And while urging the advantages of the highest preliminary education permit me to point to the superior opportunities this University affords to those in search of such a gain; and also permit me to add that they are opportunities for which in a great measure the Dominion is indebted to our learned Principal, whose successful labors in elevating education among us, and promot-

ing its diffusion in its varied departments have won for him the gratitude of all by whom they can be appreciated.

Once entered upon the study of medicine act out the note of Lucretius, "a falling drop at last will cave a stone." Avoid the mistake of attempting too much. The celerity that makes the ocean cable or circular saw valuable will mar the student. Impatience is one of the giants he has to war with. The last lecture, the capping day, the start in life, the first fee—all seem so far off that the desire is to draw them nearer—to shorten time and pile on studies. A forcing system is apt to be instituted; the most jejune compendium, the most condensed notes, are most pondered. Such a plan may help to pass an examination, but it will fail in after life. What is got by it will be like snow, quickly gathered and quickly melted away. In winter you may not have time for much more, but in summer you have, and then your reading should extend to the best modern authors on important subjects, and your time be largely spent in the Hospitals. Your memory is to be the infirmary, from the resources of which your patients are to be treated, *secundum artem*, and therefore you cannot too richly store its cells. Depend upon it a year or so more, when this is the object, will not eventually be regretted. In my time it was not unusual to study five years; and when I look across the almost quarter of a century that has lapsed since my five ended I have no regret because they were so many.

Again:

"Like an inverted cone
 "Wants the proper base to stand upon,"

do not invert the order of your studies. Another error to be shunned is to study the final branches before the primary. It is the loss of method, and that is a cause of imperfection; even haste is here no excuse. Though these be the days of electric speed and steam force, yet in their haste there is method. The telegraph message or river propeller run their course in order; so, whatever be the haste to get through medicine, the student should go, like them, right straight through his course in the proper way without either slip or skip. Get such an acquaintance with the rudiments, that they shall be the firm scaffolding or frame of the edifice you are to surround and fill in with all that will complete its structure. Undoubtedly you will have knotty things to master, but be not faint hearted; what others have accomplished you can achieve. They were just as raw and verdant at the start. But they won the victory in time, by constant application, diligence.

during lectures, and persevering study. Therefore "*nil desperandum*;" the same means will as surely carry you through. If "*perge et prospera*" be your watchword you will cross the Alpine ridges of ignorance with a splendid array of forces, and be so able to marshall your army of medical lore as to meet any move on the chess-board of disease and accident. Do not drop what is hard, but study it the harder. and, though but two courses be exacted, fail not to add a third on the branch you feel to be to you as the heel to Achilles.

At your lectures be punctual, be regular, be constant, be exemplary. It is a bad prognostic to see a young fellow who has paid out his father's money, got usually after much toil on the old man's part, instead of reaping the advantages it procures for him lounging his time about the College premises or sauntering through the streets. I know of no student who was attentive at his lectures with a fair share of intelligence, who was ever plucked. A chronic system of neglect, however, will inevitably ruin anyone. Be diligent in every useful way. At your lectures carry off all the information you can; from the wordy flood poured forth make rivulets on paper from which the brain may drink in afterwards; otherwise the whole will probably slide over both ears unheeded and uncaught. Often try to recall what you have learned, digest it, sink it deep into your mind; and from time to time hold an assize with yourself as to your proficiency by constituting yourself both the examiner and the examined.

It is often said of a physician, his popularity is due to his manners; while then you are preparing for his position attend also to their culture; as you would have them then so you should trim them now. Let the shadow that falls from you upon others be gentle, kind and genial. Let it not be coarse nor repulsive, for the sick you will have to attend may be of delicate feeling, cultivated taste, and refined minds. Let it leave no remembrance of vulgarity to wound the tenderest nature. Let it always be humane and sympathizing. Let it not exhibit any kindred with a spirit of Vandalism, that delights in wanton wrong; and let it not mar its influence by any occasional burst of rowdyism or wild puerile folly. And while the shadow that falls from you should have these traits let it also have a quiet, grave cast. Your manners should leave such a shadow, for the business of the physician is no sport; impending death is no joke; the responsibility of having a man's life in your hands is no farce; the guilt of not having done all you should have done is no trifle.

As nothing is harder to escape than the snares of

bad habits, once their coils have been spun, so medical students should not form habits unsuited to practitioners. In no other profession than the medical is there greater need for a man to be sober. Unless the upper decks be kept clear for action his wits are not fit to meet an engagement. If I could gain the ear of an inebriate who prefers intemperance to reason I would tell him to aim to be almost anything but a drunken doctor. I would tell him that as such sooner or later he will inflict injury and reduce himself to penury. What more unfit than him when muddled or half mad to rule where every hope lingers upon his words; where bleeding hearts look to him to save a dying mother; where his groggy fingers try to impart news to his maudlin brain or shake out its behests! Who that could avoid him, would have him?

Now for a few words on smoking. I do not say "thou shall not smoke tobacco," after the authorities of Berne, who caused these words to be written on a tablet of their church; nor will I uphold to your imitation the pattern of Dr. Parr, who, unless asleep or eating, was usually found burning the weed; but I advise those of you who smoke to do so at the right time, and in the right place, and so that it will not weaken your energy nor fog your mind. Dissection would be finer if while being done the hand were not weakened by the narcotic. The atmosphere of the class-room would be more pure and bracing, more conducive to attention and memory if it were not soiled with deadening nicotine.

Set a proper estimate on the worth of life. No study can be too great which will enable you to save life, or make it more enjoyable; these are the objects of medicine; these are the merits you must affirm you have before you can be enlisted into her ranks. Before you can be graduated you will have to swear "*coram Deo*" that you possess "*Omnia ad aegrotorum corporum salutem conducentia*," in other words that you are masters of the skill and art which conduce to the recovery of the sick. What a motive is this to urge you to turn your advantages to the best account; to give the full benefit of all the resources science places within your reach to your patient who looks to you, under the Great Physician, to prolong his days, and avert the calamity his death would cause. Be no respecter of patients. Treat all alike. Destitution may mask the noblest front. Some physicians were once consulting over a loathsome looking object upon the pallet of an Hospital, and when their prescription was given it was added in Latin "let the experiment be made upon the vile body." Instantly the mass of woe I started from disguise, and in the

same tongue remonstrated "let not that body be called vile for which Christ died."

Think highly of your profession; think of its interest and learning; think of it as honorable and noble, as useful and God-like. Its fields are ripe with opportunities to grace a life of true religion. There are rare chances for being unspotted when gold would tempt to purloin or to pay unnecessary visits, or to needlessly officiate, or to speak falsely. There, where there is "a constant interruption of pleasure," self-denial can shine out in full splendor. There may be kindled the flame which will cause your breasts to burn with fellow-feeling, tender pity, and kind compassion. There may be sown broadcast the seed that will richly store your garner with the praises of benevolence, humanity and philanthropy. And there can be conferred such acts of charity as may well challenge others to excel them in being more disinterested and less ostentatious.

Be heroes in the strife; your reputation is not to be won at the cannon's mouth, nor your breast adorned with valor's clasp; but a heroism may glisten in your eye the world's brave heroes never knew; when pestilence causes the eagle eye of the soldier of the forlorn hope to quail, or his lion heart to fail, then, like one of old, you may stand between the living and the dead. Your spirit is not to be fired by the carnage of a nation, nor the wails of the bereaved, nor the triumphs of might over the weak, nor the panegyrics of the press, but by the prospects of recovered health and happiness and prosperity; by the promptings of conservatism and by kind concern at human pain.

Let your life be as a sun of wisdom shining out upon the world to which your influence extends; let it be unsullied by a cloud of suspicion against your worth or sincerity; and when the crimson of the sunset sky paints the evening, when you shall no more go forth to work, then, in the night that follows, the bright stars that have treasured up the light of the past will shine for to welcome you home to "the Mountain of Myrrh and to the hill of Frankincense."

INTRODUCTORY LECTURE TO THE SECOND SESSION OF THE MEDICAL FACULTY OF THE UNIVERSITY OF BISHOP'S COLLEGE,

DELIVERED ON THE 2ND OCTOBER, 1872, BY FRANCIS WAYLAND CAMPBELL, A.M., M.D., L.R.C.P., LONDON, Professor of Physiology.

MR. PRINCIPAL, DEAN, AND GENTLEMEN,—Deputed, as I have been, by my colleagues to deliver the opening lecture of the Second Session of the Medical Faculty of the University of Bishop's College, allow me on their behalf to wish you, one and all,

a cordial welcome. To those who return to us, after a comparative rest of six months, we extend our greetings, as to old and well tried friends. We feel that to you we owe much of the position which we occupy to-day. At a time, when many had much to say against the establishment of a new Medical School in this the Metropolitan City of the Dominion, you rallied around our standard, and enabled us to carry to completion, the most successful first session of any Medical Faculty ever established in Canada. When I pause and look back upon the well nigh two years which have elapsed since the nucleus of this School was formed, I am free to admit that the success which has attended us, has been far beyond even what we felt sure would follow our efforts to establish in this fair and flourishing city, a new School of Medicine. It would be idle, gentlemen, to say that we did not feel anxious, for I can assure you that, among those who took part in the early work of organizing this Faculty, there was much anxious consideration, many hours of perplexing consultation. It was not all smooth sailing. Difficulties, many of which we never dreamed of, were constantly rising in our path, and I do not think that I make an admission of cowardness or of weakness, when I say that more than once it seemed as if all our weeks and months of toil were going to be for nought. We, however, felt that it was for the interest of the general Medical Profession of this city, as well as your interest, gentlemen, that we should persevere, and open our school. Had it not been that we felt this most strongly, I fear we should have abandoned the idea. But having once put our hands to the plough, we determined to look steadily forward, and with faith in our cause, abide the issue. That we were right in doing so, has, we think, been most satisfactorily attested by the twenty-five gentlemen, who, last year, enrolled themselves upon our matriculation register, as medical students of Bishop's College. With the exception of those who last spring took our diploma, I believe every member of the class of 1871-72 return to continue their studies with us. I need hardly say that to us this is an extremely gratifying fact, as it proves that the exertions which were made upon their behalf have been appreciated. I trust that the months which have intervened since the close of last session have not altogether been devoted to pleasure; that the warm and oppressive months of summer did not curdle the youthful blood within your veins, but that some little time was devoted to work, and that now you return to us, laden with the knowledge that you have acquired.

To those who come to us for the first time, who to-day enrol themselves as students of medicine, we likewise extend our hearty welcome. At the very outset of your student's career, I would not wish to say one word which will dampen the ardor which I feel sure pervades each breast. Yet I feel that my duty would not be performed did I not ask each one of you if you have well considered the very important step which you are now taking. If you have, and it seems to me that your answer is in the affirmative, I welcome you to the work which, though arduous and entailing constant toil, has much about it which is pleasant and agreeable. Indeed, gentlemen, in after years, when the cares and anxieties of practice surround you, you will often look back upon your student's life as being one of the green spots, an ever-to-be-remembered landmark in your existence. To-day you enter upon your work, full of energy and of hope, and it is well you should do so, for on the very threshold of your studies, you will meet with not a little which will perplex and worry you. Be not dismayed, gentlemen, but persevere; remember the proverbs "*There is no Royal road to learning*," and "*What is worth having, is worth fighting for*." In the words of Dr. Williams, "I almost envy the pleasure, in young and ardent minds, of rising step by step, in knowledge, and delighting in the wonders of the enlarging view. I admit that the ascent is arduous, that it requires hard labor, and no little self-denial. But is there no compensation in the delight of acquiring knowledge and intellectual power? No gratification in learning and contemplating the intricate beauties of the most perfect part of the creation? Is there no moral and religious good to our own minds in tracing out and unveiling its frailties, weakness, decay and death? No satisfaction in learning of means which a gracious Providence, supplies for preventing and removing the ills which flesh is heir to; for relief of pain, suffering, and weakness, and the restoration of health and strength? And if from present studies, you carry your anticipations onward to their final object in practice—under heaven, yourselves to ease suffering humanity, and to invigorate and prolong life—is the pursuit less noble, or less worthy of your highest thought? Need I say more, for the moral and intellectual greatness of our art.

"Is a study noble in proportion to the breadth and depth, and diversity of the knowledge on which it is founded? Then think of medicine! how she levies her contributions from every branch of knowledge. The human body exhibits a machinery

so perfect, that the most skilful mechanical philosopher may take lessons from studying it. It contains a laboratory so diversified, and chemical processes so subtle, that therein the ability of the most expert chemist is far surpassed. But the knowledge of the student of medicine must go beyond that of the mechanical and chemical philosopher. He must study those vital properties of which they can tell him nothing. He must become acquainted with the attributes of life operating in matter. In animal generation, nutrition, growth, secretion, motion and sensation; in the variations of these processes, in their decay, and in their cessation, which is death, he has a complicated study, peculiarly his own. He has, besides, to contemplate the body under disease, and to bring to his aid the three kingdoms of nature, and almost every art and every science, for agents and means to counteract and control that which disturbs its well-being. But if you would see the moral influence of medicine depicted in its liveliest hues, I would ask you to contemplate a domestic scene, a family whose hearts are wrung with a dreadful anxiety for one vibrating between life and death. What a ministering angel does the physician seem! How they watch his every look! with what breathless earnestness do they hang on his words; and those words how they wing themselves to the souls of the hearers for sorrow or for joy. Yet such scenes are passing daily, yes, hourly, in every class of society, in the mansion and in the cottage; they open the hearts of all; for the moral influence of medicine is bound up with the treasures of life and health, and with all those endearing ties that make these treasures doubly precious." Such, gentlemen, is a very brief description of the profession whose study you this day enter upon. I trust it has given you a clearer conception of the grandeur of our mission, and has increased your determination to be no laggard in acquiring that information, which it is necessary you should obtain, before this University can confer upon you the degree of Master in Surgery, and Doctor of Medicine. Every day of your student's life will have its duties, which if neglected and postponed will accumulate so rapidly upon you that it will soon be out of your power to overtake them. Let me therefore impress upon you, with all the force I can command, not to procrastinate, but to arrange in a methodical manner, your daily routine of work, and, having so arranged it, let no trivial circumstance cause you to deviate from it. This plan of methodicity is one which is invaluable at all periods of our lives, and I know of no better time to adopt its practice than when commencing the study

of medicine. It is really surprising what an amount of work can be gone through with, when this course is followed; but, as an additional inducement, I would say that men who are methodical in their habits are generally of a practical turn of mind, and that practical men are usually not only those who deserve success, but who have it. Let not the allurements, the temptations of a great city, its gilt and glitter, dazzle your eyes, and draw away your attention from that, which for the next six months should be uppermost in your mind. Fix your eyes steadily at the point towards which you are aiming; turn your head neither to the right hand, nor to the left hand, press steadily forward, and, when the session closes next spring, you will have the satisfaction of knowing that your time has been well and profitably passed, and that you have stored up not a little information, which will enable you next year to proceed to the more practical part of your studies. This session, to a very extent, your attention will be directed to those elementary branches which constitute the ground work of our profession. It is very essential that you should pay the closest possible attention to Anatomy, Chemistry, Materia Medica, and Physiology. Under the head of Anatomy, I include not only the regular course given by the professor of that branch, but the continuance of its study, upon the dead body in the dissecting room. The importance of this portion of your studies cannot be over estimated, enabling you, as it does, to examine *in situ* those parts with which surgeons should be perfectly familiar. In being able to prosecute this study openly, you are placed in a position of great privilege, compared with those who, even a comparatively few years ago, occupied the same position that you do to-day. To the public mind, however, there is still the same horror connected with this use of the dead subject as there was when Herophilus, a Greek physician, 570 years before Christ, first used for the purposes of dissection the human body. Nor is it likely that with the great mass of the public this feeling will ever be overcome. It is so thoroughly engrafted in human nature, that nothing but a thorough realization of its absolute necessity can, I believe, ever reconcile any one to its adoption. While, therefore, I recommend close attention in the room which is devoted to Practical Anatomy, I also ask you to look with reverence upon those poor relics of humanity, which are its occupants, and which the law of the land has appropriated for your use. Remember that the cold inanimate form which will then lie before you was once tenanted by an immortal soul, and walked erect,

the image of its Maker. But, gentlemen, although I speak thus strongly about the attention due to Anatomy, do not for one moment imagine that I do not attach the utmost importance to the other branches which constitute the remainder of your elementary medical education. I have first brought Anatomy before your notice, and urged your particular attention to it, because among students it is generally considered somewhat dry and uninteresting, and the subject which, above all others, they can most readily neglect. A greater mistake was never made. Its importance cannot be too strongly brought before you, while I assure you the interesting character of the study will certainly be appreciated by those who honestly and conscientiously set themselves to work to study the wonderful mechanism which the Almighty has created.

Chemistry, another elementary branch, will command a portion of your time, and is sure to rivet your attention from the interesting character of the study itself. Its importance, in connection with the science of Medicine, is every year becoming more evident. The gigantic strides which it has made within a comparatively few years has enabled much that was before of a somewhat dubious character in other departments of Medicine, to be settled definitely.

Materia Medica, or that branch of the Science of Medicine which treats of the nature and properties of all the substances that are employed for the cure of disease, is also an elementary or primary branch, and should be one of the lectures taken by all first year students. Its study is deeply interesting, and when we consider the vast number of drugs and herbs which now comprise the Materia Medica, and the very important purposes to which they administer, it is an absolute necessity that it should be completely mastered. I need hardly say one word, how necessary it is that every medical man should be able to know the general properties of the great majority of these drugs, for it is self-evident, and requires no amplification.

Physiology, which I have the honor to teach in this University, is the last on the list of primary branches, and, of all the subjects comprised in the elementary course, it is the one which, in my opinion, has most to commend it, as a purely interesting study to the student of Medicine. In ancient times, Physiology formed part of Astronomy, Alchemy and Physics, and was conducted or formed by speculative reasoning, without having any basis of established facts. The ideas of ancient philosophers, who attempted to unravel the

mysteries of nature by what is generally known as the intuitive method, have gradually been swept away. To-day, after ages of observation and the collection of facts by intellects capable of understanding, or, at all events, to some extent unravelling them, we find ourselves as it were still but on the threshold of the door. But as we stand there—knowing as we now do, that all nature works by immutable laws—we strain our eyes and look hopefully towards the future. Here and there, we see in the distance, light glimmering, and as those true and faithful workers in the field of Physiological science, who to-day are laboring so nobly—in the front rank of which stands Brown-Sequard—add new facts, this light will grow brighter, until theory is banished from Physiological domain. During the early history of this department of medicine, the progress and development of Anatomy did much to advance it, giving valuable information concerning various functions of the body. Within the last fifteen years, the microscope has laid physiological workers under great indebtedness, and it is destined in the future to lead to still greater discoveries. Chemistry also, has a most important bearing on the advancement of Physiology. As a most striking example of this, I would mention the discovery of the properties of the gases of the atmosphere, and the relations which they have to the blood. To Lavoisier, we are indebted for this discovery, which was the first definite idea ever enunciated to account for the phenomena of Respiration. Modern Physiological Chemistry has given us the knowledge of many of the essential phenomena of life, and ere long it will explain many questions concerning nutrition which at the present moment are shrouded in obscurity. In a word, you trace the works of nature through every gradation of their development; you define the limits between the organic and inorganic kingdoms, the connexion between the animal and vegetable kingdom, and trace out the latter from the mere germinating corpuscle, to that wonderful and complex machine—the human body. You will learn the functions of the brain and of the nerves. You will by it be taught how the body is fed, how the food is converted into material with which to nourish the body; the modifications which this material undergoes, and how it circulates through every part of the body. In a word, you will have brought in review before you, the functions of every part and of every organ of the human body, and the relation which each bears towards the other. I have thus briefly glanced at the four subjects, which are known generally under the name of primary branches, and which will form the ground work of your me-

dical education. I trust that you are convinced of their importance, and of the very intimate relations they bear to each other, and how essential it is that you should be masters of them before entering upon the study of the practical part of your profession. How, for instance, could you undertake a difficult and delicate operation in Surgery, or even the comparatively easy one of amputating a large extremity, without having a perfect knowledge of the Anatomy of the parts upon which you were about to cut. How could you understand pathological or diseased conditions, if destitute of a good comprehension of those Physiological laws which govern the human body in a state of health. How could you dare venture to interfere with an organ in a diseased state, if you were unacquainted with the manner in which its healthy function was performed. Gentlemen, it would not only be wrong, it would be madness in any one to attempt it. It will, therefore, be the constant aim of the Medical Faculty of this University, to thoroughly prepare their students in the elementary portion of their profession. When this has been done, the acquisition of the remaining or final branches will not be attended by half the toil that would have been required, had your first year or two been allowed to pass without close devotion to study. It is not my intention to allude at all in detail to the final branches, that task will more properly become the duty of some final professor, who may, upon some future occasion, occupy the position which I do to-day.

I cannot however allow this opportunity to pass without expressing my very strong conviction upon one portion of final study—I mean Hospital attendance. I am the more anxious to do so because within the few weeks preceding the first session of this University, and during the past few weeks, the question has been very prominently brought before me. I have been asked by students, some of whom are present here to-day, whether I would advise attendance upon Hospital practice during the first year of study. My answer to this enquiry has invariably been in the affirmative, and my reasons for doing so may be very briefly stated. In passing from bed to bed, and from ward to ward, the eye of a first-year student is being gradually, though almost unconsciously educated to the appearances presented by the different forms of disease; he becomes familiar with the methods adopted to elucidate symptoms in something like regular order; he is soon able to distinguish a hard, a soft, a small, or a wiry pulse; his ear is gradually being educated to the use of the stethoscope, and long before he fully comprehends the causes which

give rise to "*mucus rals*" or a "*Fine crepitus*," he is aptly able to distinguish the one from the other; technical words, some of them difficult of pronunciation, get familiar to him,—in fine his faculty of observation is being educated, and I know of no faculty more worthy of being taught, or more necessary to the physician. If properly cultivated during your student's career, it will render the diagnosis of cases comparatively easy to you, when thrown entirely upon your own responsibility. By closely following the Hospital wards from the commencement of your pupilage, this faculty will be constantly brought into play; it will thus expand, and, to the keen observer, with one half the trouble, signs and symptoms, which may have escaped the attention of those in whom observation is dormant, will be brought to the surface, and receive due attention.

Hospital attendance is every year assuming more importance in the eyes of those best qualified to judge, and I hope the day is not far distant, when the amount of it which is at present required by the law of Canada, viz, one year will at least be doubled. Two years practical illustration of the doctrine inculcated in the lecture room is not more than enough, and in after life will be well appreciated by all who take it. In fact, gentlemen, when I look about me, and see the course of those who attended lectures with me, I am struck with the fact, that those who have been most successful are those who upon every possible opportunity were at the bedside, examining, watching and recording cases. If I could urge no higher motive than that pecuniary and professional success was the sure reward of the close hospital student, I would still press you to it. But there is a nobler motive still, and when I mention it I am sure it will find a response in every breast. You accept a high and holy trust, when the parchment, which certifies your qualification to practice the healing art, is placed in your possession. For the proper fulfilment of this trust you will one day have to give an account. It is therefore your *duty* to your fellow men to prepare in every possible way, so that when called to practice your profession, you may be able to bring to your aid every possible element of success. I know of none more likely to come to your assistance, when you first commence practice, and lack that which will alone give you confidence—experience—than the hours and days you have passed in Hospital attendance. At the very commencement then of your student's career I would advise your commencing "*to walk*" the Hospital. Not in the too literal application of some students, who walk the wards without ever making an attempt to listen

to the clinical remarks, passing their time in frivolous amusement, but with an honest determination to avail yourself of every opportunity to increase your store of practical knowledge. If you do this, gentlemen, I have no fear of the result, when you commence practice, and are thrown upon your own responsibility. No matter how sudden or how great the emergency, which may call for instant action, you will be found prepared, and will never cease to be thankful for the long and close attention you gave to the Hospital wards. I cannot leave this subject of Hospital attendance, without a word or two with regard to a complaint, which was becoming common, even while I was a student. I allude to the comparatively small number of clinical teachers, when compared to the number of students, at the Hospital attended principally by the English speaking students. Only two Physicians attend at one time, and as the number of students is seldom much under one hundred, even if equally divided, it would give about fifty each. I need hardly express my opinion that this number is a half more than any one man can do justice to, and that when students complain that from the numbers crowding around the bed they are deprived of much information, which they might otherwise obtain, there is reason in their murmuring. I have good reasons to know that this fact is well known and appreciated by a number of the influential governors of that institution, and I much mistake the spirit of those men, and of the age in which we live, if the system, which has so long prevailed in that institution, and which has prevented a fair representation of the general outside profession upon its staff, and a thorough utilization of its material for the purposes of Clinical teaching, is not fast drawing to a close.

Having said so much with reference to the profession of Medicine as it concerns ourselves, I desire, before closing, to say a few words with regard to its proper function in society. At a time like the present, which by all is acknowledged to be one of rapid transition, and when everything is investigated with the keenest scrutiny, the question is often asked, and but seldom answered, whether the medical profession, as a whole, really does perform what it professes; whether it lowers the rate of mortality, diminishes the total amount of sickness, and favors the growth of a robust and healthy population. Even in ancient times this question occupied the attention of some of the wisest men of that period, who came to a conclusion, which I think we will hardly admit was satisfactory. They asserted that one office of the state was to ensure that all members of the com-

munity should be well trained and fitted to discharge what ever duty their station in life called them to perform. Health was absolutely requisite for them. They, therefore, saw that to rear the sickly or to prolong the career of the intemperate, to enable the constitutionally diseased to protract a useless existence and to beget children, which in all probability, would be as unhealthy as themselves, was not the way to make a people healthy. They therefore maintained "that the healing art was revealed by the gods, for the benefit of those whose constitutions were naturally sound, and had not been impaired by their habits of life, but who, attacked by some specific complaint, might be speedily restored to the discharge of their duties. But for the constitutionally diseased and the intemperate, they looked upon the existence of such a man as no gain either to himself or to others, therefore they thought that to attempt to cure such a one was wrong."

Such was the opinion of very wise ancient philosophers, and it certainly will be admitted that such a system, if properly carried out, would attain the desired end. By weeding out those who were sickly, and only bringing up the children of healthy parents, there is little doubt but that many of the ills by which we are afflicted might be eradicated. Indeed, at the present day, this is precisely the plan adopted to rear a particularly fine race among the lower animals. But, thank God, we have learned a higher morality than was taught at the time of Socrates, and, holding deeper views of the sanctity which attaches to each individual life, would shrink with horror from any proposal of that kind. What then is the alternative? Are we to continue to exhaust all the resources of our art, all the improved means which the advance of science has placed at our disposal, in rearing the scrofulous, training the idiotic, enabling the phthisical to marry, to do, in fact, all in our power to counteract that law of nature which provides that in the struggle for existence, the strongest and the healthiest shall survive and carry on the race? At the present time, we have a clearer knowledge of the powers of the remedies we employ, and the objects to be aimed at in their administration. We now know that many of the effects which in former times were attributed to our remedies, are really due to the natural course of the disease. A better knowledge of Pathology, and an improved means of diagnosis, have taught us that many manifestations of disease which, in former times, would have been looked upon as group of symptoms amenable to treatment, are really due to disorganization of vital organs. Though many diseases

are quite under our control, and our means of successful treatment are being constantly increased, there is sure ever to remain a large class of cases, whose condition was hopeless, long before the physician was called in, and in whom the disease will run its course, unaffected by any treatment which we may adopt. But while we admit that our power of curing disease, will in all human probability, always be limited, it is a grand, a glorious satisfaction to know that our power of preventing it admits of indefinite extension. This is the true answer to the objections against the utility of our art, on the ground that, by enabling the feeble and sickly to live and breed, we are really promoting the growth of an unhealthy population.

Recognising, as we now do, that all forms of sickness—whether it be those awful visitations of epidemic pestilence which our ancestors regarded as caused by the direct interposition of supernatural power, or those far more mysterious and inexplicable constitutional taints which, handed down, from parent to child, are the fruitful cause of so much disease—all these, I say, are really due to material causes, and governed by natural laws, which are to a great extent in our control. If, therefore, we can succeed in removing these causes, and so cut off any fresh developments, we may expect the gradual extinction even of the most distinctly hereditary diseases—for, do what we will, the tainted part of the community is far too heavily weighted to prevail ultimately in the race of life. Such, then, being our objects, I think that, so far from being excluded from the state, we deserve a place among its guardians.

Our knowledge, indeed, of the causes of diseases, and of the means of preventing them, rudimentary as they are, are yet far in advance of our actual practice. For this we are not responsible; it is due to ignorance and consequent apathy or prejudice on the part of the great body of the people, who, it seems, to me will never comprehend that thousands and thousands of lives are annually lost, sacrificed to ignorance, often to prejudice. To see this illustrated in all its horror we have not to go far from home, for during the past year in our own good city of Montreal, close upon 1000 lives were sacrificed to that terrible scourge, Small Pox, nearly every one of which might have been saved had vaccination and re-vaccination been performed.

We meet to day, gentlemen, in this beautiful building, and in this spacious lecture room for the first time. The Faculty of Medicine feeling the inconveniences to which the students were placed last session, not having proper accommodation, determined to

provide a building specially devoted to the purpose of Medical instruction. It was a bold undertaking, for a school only one year old, to put up such a building as we occupy to-day, but the promises of support were so general, that we felt justified in assuming the responsibility which its erection entails. It is not more than seventeen weeks since the first stone of the building was laid and its erection has taken place with wonderful rapidity. Although not yet out of the hands of the contractors, it is so far advanced, that the college work can go on without interruption. When completed it will be excelled by only one Medical School in the Dominion of Canada. Gentleman, I must close. Use the opportunities which will soon be presented to you, so that, when your period of training is over, and you leave these walls to begin the great battle with disease and death, you may be well armed and equipped for the contest. With moral principles strengthened by habits of industry and perseverance, with your intellect free from prejudice, clear seeing, well furnished with scientific and practical knowledge; with your faculties disciplined for the work you have to perform, you will show yourself not unworthy of this University or of that profession which is confined to no people and to no country, but whose object is the relief of evils common to the whole human family.

Do not, gentlemen, think that I have painted in too glowing colors the profession whose study you this day enter upon. Morally and intellectually I cannot over-rate it; and now, when toil and exertion is required. I would cheer and encourage you, by reminding you of the very great intrinsic gratification which these studies may afford, and of the nobleness of the objects for which they prepare you.

A late writer says "it is the fashion to deery our profession, to call it a poor, a degraded profession. If it be poor and degraded, is that the fault of the calling or of those who practice it? Is the art of healing in itself less noble, because its practitioners, too often unsustained by a consciousness of their own dignity, have not raised it to the place in society which it ought to hold? Poor it may be! Slighted it may be! but degraded it cannot, shall not be, so long as its foundation is science, and its end the good of mankind."

Montreal, 2nd October, 1872.

MONTREAL SCHOOL OF MEDICINE.

SYNOPSIS OF THE INTRODUCTORY LECTURE DELIVERED ON THE
1ST OCTOBER, BY J. E. D'ORSENNENS, M.D.,
Professor of Chemistry.

After having spoken of the position attained by its professors, and of the experience acquired by

each in the particular branch they taught, and actually by the same men who accepted them at the foundation of the school, the learned lecturer remembered with delight some of the old pupils of the Montreal School of Medicine. Everywhere, said he, we see them in the highest positions as men of science and good physicians. Drs. Rottot and Brosseau, two of our old pupils, have been admitted with us. The medical schools of McGill and Victoria University, have had no other rivalry but that dictated by noble emulation, a national sentiment and real patriotism. The University of Bishop's College is another impetus, and each of these schools will make constant efforts to maintain the first place in society by the superiority of the pupils they will send forth. We hope to have this honor by the superior classical education which young men receive in our Canadian Colleges. When they leave these institutions after eight years of hard study devoted to classics and kindred sciences, they are apt to undertake the difficult and extended study of our profession. It is by the advantages of this classical education, that in medical instruction we can always distinguish our pupils, and foresee the future for them. Without calling upon the national sentiment and patriotism, interest ought to guide them within these precincts where they will hear spoken their maternal language; where seven or eight hundred French Canadian medical men have studied and learned their profession, scattered all over the country and foreign cities where a great number of whom are advantageously known. Seven of the professors of this school count more than twenty-five years' professionship, each in the same branch, which they teach to-day. Where is the school of medicine that can show the same record to-day? This long experience of the professors is applied to the Maternity, the Dispensaries, and the Hotel-Dieu, this large hospital where operations kind are practiced daily, and where clinical instruction (medical and surgical) is given. The pupils of this school always came out with honor before the college of Physicians and Surgeons of Lower Canada, when obliged to answer to its examiners before we had the power of granting degrees. From them they received, as well as from their professors, compliments and felicitations upon their success. At the conclusion of his lecture, Dr. D'Orsennens spoke of the place acquired for the erection of the medical school, opposite the Hotel Dieu, and of the necessary funds for building; thanks to the liberality and great interest that the Ladies of the Hotel-Dieu have always shown towards this institution. The lecturer was loudly applauded on its conclusion. After the lecture, the president,

Dr. Beaubien, spoke in appropriate terms, also did Drs. Munro, Peltier, Bibaud, Rottot and others, and they all left the school amid great applause.

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MONTREAL, NOVEMBER, 1872.

OPENING OF THE MEDICAL SCHOOLS.

Below we give a brief account of the opening of such of the Medical Schools as have been kind enough to forward us information, or which we have ourselves obtained. As regards the Montreal schools, we believe all are satisfied with the number of students. The older school, McGill, has, we understand, about the same number as last year, there being, however, a larger number of freshmen than usual. The Montreal School of Medicine has about ninety; while the new school, Bishop's College, for its second session, has close on forty students. In Toronto, we have been informed, Victoria has received considerable augmentation to its number, compared with last year.

MCGILL UNIVERSITY.

The fortieth session of this University, was opened on the 1st October, by Professor Wright, a report of whose introductory appears in this issue. The classes this year meet in the new building, which has been erected on the college grounds, by the governors of the University. The structure is in keeping with the other University buildings, and has been arranged so as to combine every modern improvement. The building is 80 feet front by 84 feet 8 inches deep, and 48 feet high to the top of the cornice, with a further elevation of 7 feet in the roof. The latter is a half mansard, broken up by three pediments, and covered with slate. The walls are solidly built, and are all of cut stone. On the east side, facing University street, is the students entrance, leading into the basement. The lobby lands into a passage which, like the other halls, is 12 feet wide. On its left is a waiting room 30 feet wide by 32 feet 6 inches, furnished with chairs and tables. It is intended for resort during the intervals between lectures, where students may fill up their notes or otherwise profitably occupy themselves. A

strip is partitioned off and fitted to serve as a cloak room. On the right are the apartments of the caretaker, and on this floor are also spare rooms, closets, furnace and fuel cellar. On the south side of the main entrance, facing Sherbrooke street, are two apartments, one on either side. One measures 30 feet by 34 feet, the other 32 feet 6 inches by 30 feet. They are to be used, for a Library and Museum, Dr. G.W. Campbell, the Dean of the Faculty, having contributed a thousand dollars for the purpose of furnishing them. Behind these is the Chemical Class room, with professors room, the former, 30 feet by 44 feet, seated to hold 190 comfortably, and the laboratory, 32 feet 6 inches by 32 feet, for the practical chemistry class. It is provided with furnace, balance room, and all other necessary requirements. On "the first floor," is the general class room. It is 33 feet wide by 43 feet 2 inches deep. It has 11 tiers of seats, arranged, as in the other class rooms, in trilateral shape, with desks and backs regularly graded, and able to contain 208 persons. Into it two doors open, the uppermost one being exclusively for the convenience of students. Close by are two side rooms, one for the use of professors, the other for the Materia Medica Cabinets. On the opposite side is another class room, the Anatomical, 32 feet 10 inches by 43 feet, seated for 180. It is supplied with seven tiers of seats, and is well lighted with front and side windows and a glazed sky light. Behind is the Dissecting Room, 55 feet 10 inches long by 30 feet 2 inches broad, provided with sink, lift, as well as all other essential appointments, and having its floor covered with lead. At its end are two small rooms, one for the professor, and the other, which opens into it, for the Demonstrator. The building will be warmed by hot water in circulation through coils and pipes of iron. We understand that it cost about \$27,000. Altogether the building is a really splendid one, and we congratulate the Faculty upon the acquisition of it.

BISHOP'S UNIVERSITY.

This Faculty inaugurated their second session in the handsome new building which they have erected on the corner of St. George and Ontario streets. The introductory lecture was delivered by Dr. Francis W. Campbell, Professor of Physiology, and will be found in the present number of the Record. The building of the Faculty is not yet out of the hands of the contractors, so that several weeks must elapse before the sound of the hammer will cease to be heard. Its situation is very central, especially as regards the facility for Hospital attendance, being within a very few minutes walk of both the Hotel

Dieu and the Montreal General Hospitals, and was erected under the superintendence of Mr. Hodson, Architect. The first stone was laid on the 27th of May last, and the fact that it was in a condition to be used for the opening lecture on the 2nd of October is a most creditable fact to all engaged in its construction. It is built of very fine brick, with a rock face a foundation, and has a frontage of 61 feet 9 inches on Ontario street, with a depth of 50 feet on St. George street. The basement contains the janitor's apartment (four rooms) with fuel cellar, closets and store rooms. Upon the ground floor, which is entered through a handsome portico, are situated the general lecture room, which can with comfort seat one hundred and fifty students, Student's waiting room, Materia Medica Laboratory, Practical Chemistry Room, and Library. The latter is being handsomely fitted up with book-cases, which contains already some five hundred volumes. The passage on the ground floor is eight feet wide. On the second story is the Anatomical Lecture Room which is admirably adapted for the purpose it is intended, the Museum—which already contains a number of pathological specimens contributed by friends, and collected by the Curator, Dr. Perrigo—and the Dissecting Room, off of which opens a room for the use of the Demonstrator. The Dissecting Room has its floor covered with zinc, and is supplied with hot and cold water, in fact has every modern appliance used to facilitate the study of Practical Anatomy. Upon the third story is a large Smoking Room, and a Reading Room. The arrangement of the building is admitted by all who have visited it to be admirable and the Faculty have certainly shown an energy, which has never been equalled, in obtaining, in the second year of their existence, a structure, second to only one other Medical School in the Dominion of Canada.

MONTREAL SCHOOL OF MEDICINE. MEDICAL FACULTY VICTORIA COLLEGE.

The thirtieth session of this school was opened on the 1st instant, by an introductory lecture by Dr. D'Orsennens, Professor of Chemistry. Besides the Professors of the school, there were present Drs. Archambault, Meunier, Plante, Boissy, Desjardins, Quintal, Sarriers, also a number of friends of the institution and many students. The lecture being in French, we are unable to reproduce it in full, but give a brief synopsis in another column. We understand that next spring this school, stimulated by the example set them by the two English schools, intend erecting a building for their accommodation

on Upper St. Urbain street, opposite the Hotel Dieu and St. Patrick's Hospital.

VICTORIA MEDICAL COLLEGE, TORONTO.

This school also inaugurated its new building on the first of October, by a celebration, in which a very large number of the friends of the institution, ladies and gentlemen, took part. It had outgrown the premises previously occupied at Yorkville, and the present building is situated on Don Street, in close proximity to the Toronto General Hospital. The building is not yet complete, but it is in such a state of perfection as fully to warrant the opening ceremony. It is a handsome block of brick with a frontage of fifty feet and a depth of forty-five feet.

The entrance hall is wide, and from that there is access to the lecture room, the laboratory, the professors' private room, and the students' room. Up-stairs there is the dissecting room and the lecture room, with a ceiling sixteen feet high, and the benches are so arranged as to give the greatest amount of accommodation within the space.

Dr. Canniff, Dean of the Faculty, took the chair, and called upon the Rev. S. Rose to open the proceedings with prayer.

The CHAIRMAN then said that he expected to to have had the presence of the President of the University, but as he was unable to be present it devolved upon him (Dr. Canniff,) as the chief medical officer of the college, to take the chair. He begged to say that this was not the opening of the session, but only the opening of the new buildings; and he and his colleagues thought that they might open, as had been pre-arranged, and on the following day enter upon the regular college course. He would not say anything with regard to the building, but the inception of it was a happy one, and the difficulties that were in the way, he was glad to say, had been removed. He had no doubt that success would attend the medical department of the college, and he was glad to see so many able gentlemen present to give their countenance to the institution. (Applause.)

Dr. BERRYMAN came forward, on being called upon, and said he was happy to be at the inauguration of what he might call a new era in the history of Toronto. The new college had been got up in a year, and he thought that was highly creditable to the city. And not only was the effort creditable, but the complete character of the building, with its appurtenances, was equally satisfactory, and gave all accommodation for learning how to benefit mankind.

He had no doubt that many of the students in that school would be benefactors of their race, and, under these circumstances, he had great pleasure in being present.

The Rev. Professor GREGG, of Knox College, in the course of some remarks, said that he was fully persuaded that medical students had it in their power, more than all others, to illustrate the goodness of God, and bring home to the human heart the benign purposes of the Deity. It was not easy to get medical missionaries, but when men who had the great object of curing the body also took into consideration that they could benefit the immortal soul, then their mission to humanity was one that was inestimable.

The Rev. Dr. PUNSHON said it seemed to him to be a sort of mutual laudation society. Everybody had been offering their congratulations at the opening of the college, and he could say that he never had seen a better lecture-room. It was not too large to be inconvenient for the lecturer, nor was it too small, but it was about as complete as any room of the kind he had been in. To his mind, it was the happy mean that suited both the man who had to speak and those who had to hear. There were some people who talked of difficulties, but he doubted whether any lexicographer fully understood the meaning of that term. With men who meant to succeed the word had no meaning, and so he hoped it would be with the students at that college. All great men saw the difficulties that to ordinary mortals were insurmountable, but by them they were easily overcome. Great artists would have found some material to paint on had there been no canvas, and Michael Angelo was a sculptor without marble, for he carved out of a pillar of snow. Different races of men had different ideas of what was great, but the great idea that all students should keep in mind was to be best and first. Of course all could not be first; but just as the competitors in the Olympian games got strength by trial, so all men who tried would be benefited. The real merit in anything was not in the immediate success, but in trying to succeed. He predicted for the college a great future, and hoped that the young men who entered upon their studies there would attend to the healing of the souls as well as to the bodies of their patients. This was known to be a realistic age, but with all its utilitarian tendencies, he hoped that all the poetry of human nature was not departed.

The proceedings were brought to a close by Dr. Barriek moving a vote of thanks to the gentlemen who had taken part in the proceedings, and Dr.

Archibald seconded the motion, which was carried by acclamation.

QUEEN'S UNIVERSITY, KINGSTON, ONT.

The thirty-first session of the University of Queen's College, Kingston, opened on Thursday, October 3rd, by the customary ceremonies, in the Convocation Hall. In the unavoidable absence of Principal Snodgrass, the Rev. Professor Williamson occupied the chair. There were present on the platform the Rev. Professor Mowat, Rev. Professor Mackerras, Rev. Professor Ferguson and Professor Dupuis, of the Faculties of Theology and Arts; Dr. Fowler, Professor of Materia Medica and Registrar; Dr. Yates, Professor of Medicine; Dr. Lavell, Professor of Obstetrics; Dr. Neish, Professor of Anatomy; and Dr. Dupuis, Professor of Botany in the Medical School. The attendance of students was as large as usual. After prayer by the acting Principal, the opening address was delivered by Professor Dupuis, who chose for his subject the rise and progress of the sciences and their applications to the purposes of life. It was an exceedingly clear and interesting discourse on this subject, ending with a reference to the requirements of university education as affected by the progress of physical and natural science. After its delivery the Rev. Chairman and Dr. Fowler made some announcements, and the proceedings were concluded by the benediction.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

The second annual meeting of this Society was held on Saturday evening, the 5th of October, in its room, in the Natural History Society building. There was a large attendance of members. Dr. Peltier, President, occupied the chair. After routine business had been transacted, the retiring President, Dr. Peltier, addressed the meeting, thanking the Society for the great honor which it had done him, one year ago, in electing him its President. He felt at the time of his election, that there were many others of their number who would far more worthily have filled the chair, who were more conversant with the duties of such an office. But the unanimity with which his election had been made left him no alternative but to accept, and if at any time he had failed in performing his duty, they would put it down to want of experience. One thing he could affirm, and he believed all his friends would give him credit for it, and that was that he had honestly and conscientiously performed his duty to the very best of his ability. From every member of the Society he had received the greatest kindness and consideration,

and he would ever look with pride upon the time when he filled the office of President of the Medico-Chirurgical Society of Montreal. During his term of office, a number of papers had been read by the members, which would have done credit to any society in the world, and from which an amount of discussion had followed which had been exceedingly instructive. Dr. Kennedy gave a paper "On a case of Brain Laceration," which was written in as thorough and scientific a manner as could be. Dr. Howard followed by "Two cases of Aneurism," which were treated in the manner which would be anticipated from the position he occupies as Professor of Practice of Medicine and Pathology. Dr. Fenwick, always foremost in contributing to the Society, read "A case of Aneurism of the Arteria Innominata;" while Dr. Sewell contributed a report of "Abdominal Aneurism." Papers were read by Dr. Girdwood, on "A case of supposed Criminal Abortion;" Dr. David, on "Locomotor Ataxy;" Dr. Hingston, on "Re-vaccination;" Dr. Reddy, on "Embolism;" Dr. Trenholme, on "Irregular Uterine Contractions," proving that he was a master hand in uterine diseases; Dr. Drake, on "Eratie Erysipelas;" Drs. Gardner, Howard and Reddy, on "Cerebro-Spinal Meningitis." The President complimented Dr. Gardner upon the excellency of his paper, and stated that as the Society was composed of those who filled professional chairs, and those who were attached to hospitals, as well as a great number of private practitioners, the materials upon which it depended for its prosperity were so extensive and so varied, that its proceedings were of very great interest, not only to all the profession in the city, but throughout the country, who were enabled by the enterprise of Drs. Fenwick and Campbell, editors, to read its proceedings.

The Treasurer then read his report, shewing a balance in hand.

The election of officers took place, and resulted as follows:

President—Dr. R. Palmer Howard.

Vice-Presidents—Drs. Reddy and Craik.

Secretary-Treasurer—Dr. T. G. Roddick.

Council—Drs. Godfrey, Schmidt and Fenwick.

A notice of motion given by Dr. F. W. Campbell, to the effect that, in future, all papers read before the Society, should become its property, was then brought forward. It elicited considerable discussion.

After which, a motion moved by Dr. F. W. Campbell, and seconded by Dr. Craik, was carried, to the effect that, in future, the reader of any paper before

the Medico-Chirurgical Society of Montreal, should either place the original or a copy in the hands of the Secretary.

Dr. Godfrey enquired from the President whether the papers thus placed in the charge of the Society would be open to the inspection of members.

The President replied that, in his opinion, they would.

Some members having expressed themselves as dissenting from the opinion of the President,—

It was moved by Dr. Hingston, and seconded by Dr. Reddy:

That all papers read before the Society shall be open to inspection by members, on an order from the President.

MEETING HELD OCTOBER 19, 1872.

Dr. R. Palmer Howard, the newly elected President, took the chair, and opened the proceedings by an admirable address, in which he thanked the Society for the honor they had bestowed upon him, which was all the more acceptable to him, as it was unsolicited and unsought. They had doubtless elected him upon the ground that it was well those who had occupied other positions in the Society should be promoted. One great use, which he felt sure would be accomplished by it, was in keeping those who were busily engaged in general practice from becoming mere routinists, and cultivating in them habits of reflection. There was much to learn yet in medicine, and all should stimulate themselves, and contribute their mite towards the general fund. Especially was this the case among young practitioners, who should note cases that came under observation, and if this was enthusiastically and carefully done, no half dozen reports could be produced that would not develop some fact of material importance. This was especially *their* duty, because epidemics, as a rule, were seen principally among the poorer classes of society, among whom, during the first few years of his practice, a physician finds his occupation. It was due to ourselves, Montreal being the great centre of medical education, that all should actively engage in the work for which the Society was formed.

Drs. Simpson, Mondelet, Bull and Alloway, were elected members of the Society.

Dr. Fenwick exhibited a specimen taken from a case in the Montreal General Hospital. A gun exploded on board the S.S. *Georgia*, while firing on entering the port of Sorel. The patient was lying in bed, with his arm extended, and was struck either with a piece of the gun or of the deck. The arm

was greatly shattered, and was amputated. There was fracture of the neck of the radius, with dislocation of its head.

Dr. Fenwick then read a valuable paper on Bronchocele, in which he stated that for fully fifty years little or no advance had been made on the subject, the latest contribution being a paper by Dr. Mackenzie, which was published a few months ago in the *London Lancet*. He mentioned that Erichsen gave four divisions of the disease, viz., simple hypertrophy, cystic bronchocele, pulsating bronchocele, and acute bronchocele, while Mackenzie gives seven varieties or stages of development of the same disease, he excluding exophthalmic goitre as a distinct disease. Although he did not call in question this division, he considered that it did not at all simplify matters. He next alluded to the localities where goitre generally was found most prevalent, such as in valleys, surrounded by high hills, where the sun only entered for a small portion of each day. The treatment of goitre was then rapidly passed in review. When small, and of recent formation, and the patient was anemic, the best thing to do was to improve the general health. Iron and iodine internally were useful sometimes, as was also the application of tincture of iodine externally, in the simple form of the disease. Iodide of lead ointment was also a useful external application; and within a few years, comparatively, in India, the biniodide of mercury ointment was recommended to be applied, and the patient be exposed for some time to the rays of the sun, and was said to have had very beneficial results. He mentioned that authorities generally advised non-interference, but it sometimes had to be done, and there was now in the Museum of the London College of Surgeons, a specimen, where the lateral lobe of the tumor so pressed on the trachea that a small probe could not be introduced. Dr. Fenwick stated that if examination was given to the subject, it would be found that all the major operations of the present day were, a few years ago, condemned. He felt confident that, if the subject was earnestly taken up, it would be found that the operation for the extirpation of goitre would not only be justifiable but would be recommended. Dr. Roddick, who had but just returned from a visit to Edinboro', had informed him that when there Dr. Patrick H. Watson had told him that he had operated upon three cases of bronchocele, and that they all succeeded. This, he thought, strongly strengthened the position he had taken. He then detailed the case at length, but the following contains the pith of the case: Marie L., aged twenty-one years, was admitted into the Mon-

treau General Hospital on the 23rd of last May, with an enormous fibro cystic tumor of the neck. She is a stout, healthy-looking girl, and is the second of twelve children. Her father is a butcher, which, according to the clinical clerk who reported the case, was the cause of her being so well nourished. She was, in fact, the picture of health, and if she had not been in first-class health, she would never have survived the terrible operation through which she passed. The tumor began to grow when she was three years of age, and continued to increase in size till she was sixteen years of age. Since then it had apparently been stationary. It consisted of four lobes, two large lobes on the left side, one in the centre or isthmus, and one very large lobe on the right side. It measured seventeen inches in circumference. There was much pulsation through the mass, the veins being very large, and the entire mass was raised by the larynx in the act of swallowing. After a careful examination he came to the conclusion that it might be removed, but at great risk. On the 29th May the middle lobe was tapped, and about two ounces of bloody serum obtained, after which four drachms of strong tincture of iodine was injected into it. Two punctures were made on the border of the right lobe, but very little fluid was got. Into each of these punctures about one drachm of tincture of iodine was injected. She had sharp symptoms of iodism, but soon got perfectly well and left the hospital. She, however, returned on the 8th of June, and on the following day the operation was performed. She was placed under the influence of chloroform, and the operation commenced. Following the plan of Professor Green, of Portland, an incision was made in the median line, commencing at the upper portion of the tumor and extending down its full length. Getting on to the tumor, the fascia propria, as he calls it, was divided. Scarcely any muscular structure was to be seen, the muscles being spread out, and all but absorbed from pressure. It was so in Professor Green's cases, and it was likewise so in the present one. He found a plexus of veins running over the tumor which were thin and brittle. They tore readily and bled freely. He dissected with his finger and the back of his knife, in fact enucleated the tumor, with little difficulty getting to its pedicle, which was as thick as two thumbs. It was transixed, and the tumor removed. There was fearful hemorrhage, but the results of the operation have been very satisfactory. She was, as might have been anticipated, prostrated to such an extent that brandy and champagne had to be given in quantities really so enormous as to amaze the

worthy steward of the hospital. Life was, however, saved, which was very satisfactory. During the operation eight ligatures were used; three of these came away on the 20th of June, three on the 21st of June, and the last two on the 14th and 15th of July. Even after this there was slight hemorrhage, to the extent of four or five ounces, which occurring during the night, was promptly attended to by Dr. Roddick, the house surgeon, without sending for Dr. Fenwick. There was not any skin sacrificed, and, as might be imagined, there was considerable redundancy of it when she left the hospital; but, as she intends returning some time during the present fall to the city, he intended removing a portion of it, so as to give her a better appearance.

Dr. Hingston asked what was it that induced Dr. Fenwick to perform the operation. The patient had consulted him, being sent to him by a medical friend in the country, and, as he found her the picture of perfect health, and not suffering any inconvenience, he had advised her to go home, and not bother her head about it. The operation was certainly performed with a coolness and a steadiness worthy of all praise, and he congratulated Dr. Fenwick on having got through without fatal hemorrhage.

Dr. Trenholme remarked that Dr. Hedenus, of Germany, had operated six times in very much the same manner as just described by Dr. Fenwick. Dr. Howship mentions a case where the jugular passed through the gland, and caused great suffering from congestion of the head. The great difficulties met with in performing the operation, especially where the jugular vein passes through the gland, has inclined Mr. Holmes Coote to rank this operation, except in extreme cases where their presence was threatening life, as scarcely admissible in modern surgery; and Dr. Trenholme was inclined to coincide with this opinion. With regard to ex-ophthalmic goitre, although not directly connected with the subject of the paper just read Dr. Trenholme remarked that it had been ingeniously suggested by Dr. Graves that the "globus hystericus," so commonly accompanying nervous palpitation, was probably due to this gland being congested and pressing upon the trachea, and therefore that this affection was not entirely a nervous sensation. In the treatment of this last affection, iodine and its compounds were found useless. As it is a disease dependent upon an impoverished state of the blood and associated with uterine derangement, change of air, tonics, especially strychnine and iron, were indicated, and had been followed by the best results where employed. Iodine, or its

compounds, were of service only in the adenoid form of this disease, or goitre proper.

Dr. R. P. Howard (President) confessed that he could not conscientiously advise the performance of the operation, except in cases where, like Dr. Green's, the tumor placed life in jeopardy. While he said this he quite agreed with the other view, that if we were always to stand where we are, we would not progress. He would, however, add that operations that were once condemned are now performed, simply in the interest of life, principal among which was the operation for ovariectomy. The cases are, however, not parallel. Bronchocele seldom proved fatal. The operation of Dr. Fenwick was a brilliant one; it required a cool head and a steady hand. Although he was opposed to it, it was right to mention that others of the consulting staff of the hospital, who had more experience than he had, supported it. With regard to the causes of goitre, pathology left us in the dark; it was a puzzle. The more generally accepted idea was that it was due to lime water. If, however, this was correct, why was it so common in females. This fact was against either the theory of locality or water. The disease generally began at puberty, and stopped growing at about forty-five. It was a singular and an interesting fact, this connexion with the development of the sexual function. It was a disease seldom seen in boys, and still more seldom in men. As regards its treatment, he thought that iodine was of essential service in the simple form of the disease.

Dr. Fenwick said, in reply to Dr. Hingston's question, as to why he had performed the operation, he did so, for two, perhaps three, reasons. First, because of the effect the tumor was having upon the voice; it was changed, completely altered; it was squeaking in its character. This induced him to believe that the function of the re-current laryngeal nerve was affected, and the trachea pressed upon. The second reason was, that she insisted upon the performance of the operation; but the third reason was the conscientious belief that the tumor would be far better away, and that, if left much longer, it would seriously interfere with the act of swallowing. The operation, to a certain extent, proved that this idea was correct, as fully two inches of the œsophagus was left bare when the tumor was removed. No matter what the result of the operation might have been, he would have felt that he was perfectly justified in performing it.

Dr. Roddick said that, when asleep, the patient's breathing was so stertorous as to awake patients in the ward, who thought she was choking.

Dr. Fenwick said that the external jugular vein passed through the tumor in his case, but he did not think such being the case was any valid reason for not operating.

Dr. Scott thought Dr. Fenwick had not stated how exceedingly anxious and determined the patient was to have the operation performed.

Dr. Howard stated that one of the consulting staff was deputed to wait on the patient, and lay before her the danger of the operation. She was told that she might die under it; to which she replied she was determined to have it done.

Dr. Hingston said he took precisely the same view of the case as did Dr. Howard. When he (Dr. Hingston) saw the patient, there were no urgent symptoms, no stridor nor any squeaking of the voice; in fact, she appeared to be in perfect health. He, however, did not exactly remember the time when he saw her, so could not say what time had elapsed before she consulted Dr. Fenwick.

Dr. Reddy thought that the fact that the tumor embraced the œsophagus, a perfect justification for the operation.

The Society then adjourned.

BRANTFORD COUNTY MEDICAL ASSOCIATION.

The County of Brant Medical Association, at its last meeting, elected the following gentlemen as the officers of the Society for the ensuing year, viz.: Dr. Henwood, Brantford, President; Dr. Clarke, Paris, Vice-President; Dr. Philip, Brantford, Secretary; Dr. Griffin, Brantford, Treasurer.

This Association is in a most flourishing condition, numbering among its members nearly every registered practitioner in the County. It has now been in existence about four years, and is in a thoroughly organized condition and able to exert a beneficial influence in bringing the members into more intimate relations with each other, and thus to a great extent doing away with those jealousies which so often tend to mar professional life. A committee, consisting of Drs. Henwood, Philip and Griffin, were appointed to draw up a report of the present sanitary condition of the town of Brantford, to be submitted to the Mayor and Town Council, and reported at the next regular meeting. An interesting discussion took place upon typhoid fever at present prevalent in many parts of the West. A good deal of miscellaneous business was disposed of, after which the Association adjourned, to meet again in the Town Hall, Brantford, on the first Tuesday in December. Dr. Lawrence, the late President of the

Association, was chosen at the last election as representative of the Erie and Niagara division in the Ontario Medical Council. We will give a full report of the next meeting of the Association in the *Record*, and a synopsis of the papers that are to be read.

It is with deep regret we have to chronicle the death, by cholera, in India, of Dr. W. W. Dickson, son of the much respected Dr. J. R. Dickson, of Kingston. Dr. Dickson graduated at McGill University, in 1863, having previously studied in Queen's College, Kingston. He soon after entered the army, and proceeded to India, where he served till, suddenly attacked by cholera, he passed away, far from relatives and home. To his bereaved parents we extend our heartfelt sympathies.

CLINICAL LECTURES AT THE TORONTO GENERAL HOSPITAL.

We notice, by the *Toronto Globe* and the *Canada Lancet*, that an arrangement has been entered into by the three Toronto Medical Schools, whereby combined clinical lectures are now given at that institution, upon four days of the week.

MONTREAL COLLEGE OF PHARMACY.

This Association, composed of the Chemists and Druggists of Montreal, held its annual meeting on the 3rd of October, when the following gentlemen were elected office-bearers for the ensuing year:—President, John Gardner; Vice-President, Richmond Spencer; Treasurer, John Kerry; Secretary, James Mattinson; Council, Messrs. H. Lyman, R. Bolton, N. Mercer, E. Muir, J. Harper, B. E. McGale, R. Belmay, and J. C. Patton. They have appointed Dr. A. H. Kollmyer, lecturer on Chemistry and Materia Medica, and the lectures will commence on the 4th of November.

PERSONAL.

Dr. Robert MacDonell, F.R.S., of St. Stephens' Hospital, Dublin, was in Montreal about the 20th of September. It was the intention of some of his medical friends, who are not unacquainted with the doctor's researches in Physiology, to have entertained him at dinner. Indeed the preliminaries were arranged, when the doctor was unexpectedly obliged to leave Montreal, thus depriving them of that pleasure. He visited the Hotel Dieu Hospital during his stay.

Mr. Gaseoyen, of St. Mary's Hospital, London, was in Montreal for a few days the end of September. He called upon one or two medical friends.

Dr. Patton, of Quebec, who has practised in Cacouna, the fashionable Canadian watering place, during the past two summers, has commenced practice in Montreal.

Dr. Farrel, Professor of Surgery in Dalhousie College, Halifax, Nova Scotia, was in Montreal about the middle of October, for a few days.

Medical Items and News.

HYPOPHOSPHITES IN THE TOOTHACHE OF PREGNANCY.

Dr. Sterling believes that the toothache so common in pregnancy results from the abstraction from the blood of the salts requisite for the construction of the bones of the fetus; and accordingly recommends $1\frac{1}{2}$ grain of hypophosphite of lime, soda, potash, and manganese daily. (*American Journal*.)

SULPHATE OF IRON IN ERYSIPELAS.

Mr. Hulke, at the Middlesex Hospital, has lately tested the great efficacy of iron sulphate in extensive erysipelas. He uses it as a lotion of ten grains to an ounce of water, applied warm on a rag; and believes it acts as a local styptic, astringent, and sedative, as well as a constitutional tonic. In circumscribed erysipelas on small surfaces, he applies the ordinary coating of collodion and castor-oil. He deprecates the application of flour to any part, as a source of dirt, blebs, and maggots. So many cases of erysipelas have lately occurred in and around the hospital, that he thinks it must be caused, in wounded and weak patients, by a deleterious atmospheric influence. What the nature of this influence is, he is unable to say.

REMOVAL OF CORNS.

Hard corns may be carefully picked out by the aid of a small sharp-pointed scalpel or tenotomy knife, and if well done the cure is often radical, always perfect for the time. But they may be equally successfully removed by wearing over them for a few days a small plaster made by melting a piece of stick diachylon (emplastum plumbi), and dropping it on a piece of white silk. The corn gradually loosens from the subjacent healthy skin, and can be readily pulled or picked out. Soft corns require the use of astringents, such as alum dissolved in white of egg, or the careful application of tincture of iodine. Prevention, however, is in regard to them better than cure, and can be readily attained by daily friction with cold water between the toes.

THE TREATMENT OF HYPERÆSTHESIA OF THE VULVA AND VAGINA.

M. GUENEAU DE MUSSY (*Gaz. des Hopitaux*), is strongly opposed to the treatment adopted in

vaginismus, by Sims, and he thinks that a wise combination of therapeutic agents, together, if need be, with progressive or sudden dilatation, will often render resort to deep incisions unnecessary. He has often obtained the most happy results from the action of vaginal suppositories:—

Cacao butter	2 gram.
Bromide of Potassium	30 centigr.
Extract of Belladonna	10 "

This suppository he introduces every night, and its use is continued for two or three weeks.—*Birmingham Med. Rev.*

GALVANIC TREATMENT OF BED-SORES AND INDOLENT ULCERS.

Dr. WM. A. HAMMOND, of New York, recommends for indolent ulcers and bed-sores, the galvanic treatment as first suggested by Crussel, of St. Petersburg. He says: "During the last six years I have employed it to a great extent in the treatment of bed-sores caused by diseases of the spinal cord, and with scarcely a failure; indeed I may say, without any failure, except in two cases where deep sinuses had formed, which could not be reached by the apparatus. A thin silver plate—no thicker than a sheet of paper—is cut to the exact size and shape of the bed-sore; a zinc plate of about the same size is connected with the silver plate by fine silver or copper wire six or eight inches in length. The silver plate is then placed in immediate contact with the bed-sore, and the zinc plate on some part of the skin above, a piece of chamois-skin soaked in vinegar intervening. This must be kept moist, or there is little or no action of the battery. Within a few hours the effect is perceptible, and in a day or two the cure is complete in a great majority of cases. In a few instances a longer time is required. I have frequently seen bed-sores three or four inches in diameter, and half an inch deep, heal entirely over in forty-eight hours. Mr. Spencer Wells states that he has often witnessed large ulcers covered with granulations within twenty-four hours, and completely filled up and cicatrizations begun in forty-eight hours. During his recent visit to this country I informed him of my experience, and he reiterated his opinion that it was the best of all methods for treating ulcers of indolent characters and bed-sores."

BIRTHS.

In Toronto, on the 20th Sept., the wife of H. E. Buchan, M.D., of a son.

In Montreal, on the 1st October, the wife of Dr. McBean, of a son.

DEATHS.

At Bagatelle, Greenock, Scotland, on the 21st September, Eliza Buchanan, widow of the late Alexander Rodger, and mother of Mrs. (Dr.) Francis W. Campbell, of Montreal.

In Montreal, 29th September, Mary Frances Chipman, wife of R. P. Howard, M.D. Professor of Medicine McGill University.

At Hemmingford, Q., on the 14th September, Regenal Grant, youngest son of Dr. Glover, aged eleven weeks.

Original Communications.

OBSERVATIONS ON LITHOTRITY AND LITHOTOMY.

By WILLIAM H. HINGSTON, M.D., L.R.C.S.E., Surgeon to St. Patrick's Department, Hôtel Dieu.

(Read before the Canadian Medical Association, at its meeting in Montreal, September, 1872.)

Within the past few years, vesical calculi have, I believe, become somewhat frequent in our midst; and operative procedures for their removal are not of unusual occurrence. The frequency with which art is now sought should tend rather to increase than to diminish interest in the subject; to aid us in ascertaining the causes of its greater frequency, now that hygienic laws are more generally understood; and to direct attention to the best means of ridding the subjects of vesical calculi of a troublesome and dangerous malady. The first part of the subject would alone take up more time than is at your disposal: suffice it to say, urinary calculi originate in the "precipitation of urinary constituents, in consequence of a loss of solvent capacity in the waters of the urine; either (1) by an excess of any substance for the water to dissolve; or (2) by a deficiency of water for solution of the substance; or (3) by "the presence or absence of some third substance;" and, lastly, the deposit may aggregate from a focus of its own substance or may "gather around a foreign body as a distinct nucleus." Do these conditions obtain here more frequently than in other parts of the Dominion? I know not; but certain it is, cases of vesical calculi are far more common in this part of the Dominion than in either Nova Scotia or New Brunswick, on the one side, (where the disease is almost unknown;) or than, so far as I can learn, in the Western portion of the country; and are more common in this city than in other cities of even this portion of the Dominion; and in certain portions of this city more than in others. While the Western portion of Montreal enjoys comparative immunity from the disease, St. Mary's, St. James's and the eastern portions of St. Lawrence wards and their out-juttings St. Jean Baptiste Village and Petite Côte, have furnished by far the greater number of cases of the disease to the hospitals. Nor is the disease met with in equal ratio amongst the British and French. I have no published statistics to aid me; but my own experience, and the *parole* evidence of others, would lead me to believe that while the French Canadians are more subject to certain maladies, and the British Canadians to others, among the former have been met by far the greater number of cases of Urinary calculi. Dr. Robert Nelson, during

his residence in Montreal, operated some sixty-five times—the greater number being on French Canadians. Dr. Beaubien has had fifteen cases—all amongst French Canadians. Dr. Campbell has operated twenty times, and 15 per cent were French Canadians. Dr. Munro has operated between forty-five and fifty times, and he tells me his memory cannot recall, among that number, one who was not a French Canadian. Dr. Fenwick, who has lithotomized during the past few years in sixteen cases, and with a success that is exceedingly satisfactory, had seven among the British, and nine among the French, and all of them, save one, being natives of Canada. Of those lithotritized and lithotomized by myself, twenty-five per cent, in round numbers, were among the British, and seventy-five per cent. among the French. Thus Dr. Campbell's figures, showing a much larger percentage of British cases, may be fairly balanced by those furnished by Dr. Fenwick and myself combined; while those of Drs. Nelson, Beaubien and Munro, are without a corresponding counterpoise of cases among the British. I had not the leisure afforded me of continuing this enquiry amongst those who have performed their one or two operations each. Whatever may be the influences which combine to render Urinary calculi of greater frequency amongst the residents of this Province, than of the other,—and in this Province among our fellow citizens of French origin, I cannot even conjecture. Differences in the soil, water &c., and in other climatal conditions might be invoked in explanation of the former; but the latter must be left to speculation. So much, gentlemen, for the formation of stone, and its frequency; and now for its removal. And here I confess to some diffidence in hazarding an opinion where it might seem fitter for me to ask it. Yet an opinion must be formed, and operations must be resorted to, and it is oftentimes difficult for a surgeon, not wedded to either, to say which operation—Lithotomy or Lithotritry—is best suited to the case. I had performed Lithotomy five times, and each time with success, ere I performed my first operation of Lithotritry; but since then I have performed Lithotomy but three times, choosing, rather, the Lithotrite in every case where its employment was not clearly contra-indicated. The experience I have thus gained, limited, it is true, is this: that in the adult, hardness, and hardness alone, should offer an obstacle to the use of the Lithotrite; and that neither the size nor the number of the stones, nor even the condition of the urinary organs, should be permitted to be obstacles to the performance of Lithotritry, should that operation be preferred to its

more brilliant, more rapid, and withal more dangerous competitor—Lithotomy.

It is to be regretted that statistics do not represent the true state of the question, so far as a general comparison between the two operations is concerned; and for these reasons. For Lithotrity to be successful it is supposed to be necessary that the stone be of moderate size, single, and not too hard; and that the urinary organs be in a healthy state. I say *supposed* to be necessary, for in some of the cases I met with, the stone was large; in some cases multiple; and in more than one case the organs were in a far from healthy condition. If, however, we admit statistics as they are furnished to us by those who practise both operations, Lithotrity is one of the most satisfactory. Civiale, whom I have seen operate many times, and whose dexterity and delicacy in handling his instrument I have much admired, says that out of 591 operations there were only 14 deaths, or 1 in 42.2. This was in his own practice; while Lithotomy, until recently, gave 1 in 7.9. The statistics furnished by great Britain are meagre. Twenty-five years ago, cases were frequently sent thence to the great Lithotritist at Paris; but Brodie, Ferguson, Keith and Thompson soon came to retain in Great Britain cases that would otherwise have been sent to France. Brodie lost 9 out of 115, and of these only 5 were due to the operation. Ferguson lost 12 out of 109 cases, and Keith 7 out of 129. Sir Henry Thompson's earlier returns were 84 cases and 4 fatal. His later returns 184 cases, and recoveries 93 per cent. And, omitting five deaths from other causes, the mortality amounted to only four per cent. "I may now say, says Sir H. Thompson, "that the deaths which occurred from all causes during or after the conclusion of treatment, among 204 cases of patients, averaging 61 years of age, were 13 in number, constituting a rate of recovery of 93½ per cent. Mr. Chrichton in 122 cases had only 8 deaths, or less than one in fifteen. "Considering," says a writer, "the relative mortality of the two operations, so highly in favour of Lithotrity, the small proportion of cases submitted to this operation would scarcely seem judicious." But a more recent writer, Sir H. Thompson himself, says: "although the proportion crushed now, I believe, by most surgeons, is mostly larger than that submitted to the knife, I have ventured to regard Lithotrity as the rule, applying it to five out of every six adult cases; and to employ Lithotomy only as the exception." Gentlemen, I must be pardoned if I append my puny figures to those just read to you. I require three to make a score of cases of Lithotomy and Lithotrity combined—eight of the former and nine

of the latter. But as in one of the cases of Lithotomy I had previously lithotrotized the patient; and as in one of the cases of Lithotrity, the patient had been previously lithohomized by me; although this does not diminish the number of cases it does the number of patients, who are thereby reduced by two.* Of the eight cases of Lithotomy I have little to say. They presented no special features of interest—five of them were in children. The lateral operation was performed in all but one case—when Allarton's method was followed. They all terminated favourably. One, however, a boy, operated upon four years ago, from whom I removed a stone weighing three drachms 49 grains, still suffers, and probably ever will suffer, from incontinence of urine. The number of calculi in each case was one, with one exception. From one patient lithotomized, I removed twenty-five calculi; yet within six months I lithotritized him, new calculi having formed in the interval. Of the nine cases of Lithotrity, six recovered perfectly, and without a return of the disease; one was operated upon the second and last time more than a year ago; and of the two incompleated cases, one, undertaken at a most critical period, was abandoned; and one was partially crushed by the Lithotrite, but a sacculated bladder rendered recourse to Lithotomy necessary. In no case where the Lithotrite was used was the bladder injured, and (the same has been observed by others) even when the irritability was considerable before the operation, that irritability was lessened before any *debris* had passed away. Of the average number of sittings in each case I have no record. The greatest number, however, in any case, so far as my memory serves, was sixteen, and the fewest number was three times.

Surgical writers are accustomed to lay down certain rules for the guidance of Lithotritists which appear to me to be somewhat faulty, and to some of which I shall allude:—

1st. As to the use of chloroform. Chloroform should generally be administered. It was given in all but one case, the nervous, restless condition of the patient, and the frequently irritable condition of the bladder, rendering it necessary.

2nd. It is recommended to empty the bladder and then to inject with tepid water until that viscus contain five to six ounces of fluid. That advice I regard as most pernicious, as the injection of warm water is really more painful, and may be more dangerous, by inducing spasm of the bladder, than the intro-

* Nov. 13. An operation (Lithotomy) on a congenital case of stone in a child five years of age, performed to-day, increases that number.

duction of the Lithotrite itself; and every surgeon knows the difficulty of retaining fluid thus introduced.

3rd. It is recommended not to lithotritize unless the patient can retain his urine at least four hours. Although it is highly desirable, as an evidence of absence of irritability of the bladder, that the patient should be able to retain his urine a considerable period, in one of my most satisfactory cases the urine could not be retained as many minutes, but came trickling away into a gutta-percha bag suspended to receive it.

4th. As to the difficulty of sometimes finding the stone, all Lithotomists are agreed. The same difficulty occasionally presents itself in attempting to seize it. The instrument used, in my few cases, was the French one, introduced on the patient's right side, (patient on his back,) the instrument held perpendicularly when passing through the membranous portion of the urethra, the weight of the instrument alone propelling it. The blades were not opened till the centre of the bladder was reached, and, as recommended by Civiale, no depression was made, and the stone was not made to fall into the Lithotrite, as taught by Brodie, Heurteloup and Crampton, but seized where it was found, and generally without the blades of the instrument touching the coats of the bladder, much less injuring them.

In only one case did the patient complain of suffering after the effects of the chlorform had passed away. One of my patients, a shoemaker, was so little inconvenienced by the operation that he rarely lost any of his working hours but went cheerfully to sleep a few moments after twelve, singing the "Marseillaise," awaking suddenly to consciousness, and in time to return to the city to resume his work at one o'clock. This patient was lithotritized fifteen times altogether—eleven times on first, and four times on second occasion, when calculi had reformed after an interval of several months; yet he more than once declared in the presence of the students "je ne sentais rien." He had several large sized friable calculi—the larger *debris* of which alone nearly filled a two-ounce cerate box.

Seeing the facility with which the calculi were broken up in the few cases submitted to the action of the Lithotrite, and the inconsiderable discomfort attending and following the operation, I am of opinion that, in the adult :

- 1st. When the stone is small, we should crush.
- 2nd. When however large, if friable, crush.
- 3rd. When single, crush.
- 4th. When multiple, crush.

5th. When hard and large, whether single or multiple—we should cut.

6th. But that in all cases of children, whatever may be the size, or number, or co-existence of the calculi, we should lithotomize.

Corner Union Avenue and St. Catherine Street.

Montreal, September, 1872.

N.B.—While this short imperfect sketch, written chiefly for the purpose of adding a little to the interest of the Montreal meeting of the Canadian Medical Association, is passing through the press, I am perusing for the first time, Sir Henry Thompson's admirable work, "Practical Lithotomy and Lithotomy." Although many of Sir Henry's observations are embodied in Holmes, Gant, Erichson, and other works of systematic surgery, the comprehensive and exhaustive nature of his monograph can only be appreciated on perusal. While much of what I have written is fully and ably treated by Sir Henry, I am not a little pleased that many of the impressions conveyed to my mind by the observation of a few cases on this side of the Atlantic, are the echoes of more powerful impressions on the earnest mind of the most accomplished living Lithotritist, by the treatment of cases more than twelve times the number.

A Case of Abdominal Tumor. By E. H. TRENHOLME, M.A., M.D., Professor of Midwifery and Diseases of Women and Children, University of Bishop's College, Fellow of the Obstetric Society of London, (England), Attending Physician to the Montreal Dispensary, &c., &c., &c.

The following presents some features of interest, which has induced me to bring it before the notice of this Society.

The subject of this sketch, Mrs. G., a native of England, æt. 70 years, was a well-developed, fair-sized and healthy-looking woman, with a slight stoop in her gait. She consulted me upon several occasions during the early part of 1870, for pains in the stomach and "dyspepsia." Notwithstanding these occasional attacks, she was able to attend more or less regularly to her duties up to the first part of April, when she was obliged to confine herself to the house on account of the increased violence of the pains already mentioned. The patient, at this time, could not eat her food, sleep, or rest, and by the middle of April, she could bear it no longer, and I was sent for to see her. I found the patient suffering as just described, and much shattered in strength,

After questioning her as to the state of her bowels, urine and stomach, which I found to be normal, I then proceeded to make a thorough examination of the abdomen, at the seat of the pain, which pain, according to her story, was nearly at the pit of the stomach, a little to the left side. Upon palpitation, I found a tumor on the left side, in the left lumbar region, close up to and under the cartilages of the ribs, and pressing against the diaphragm. The tumor is not movable, and is about the size of the closed fist, and of a firm and hard structure. This growth was evidently the cause of those pains and obscure gastric symptoms already mentioned. Strange to say that, although the growth was situated in such a position that it must have been compressed by the clothing fastened to the waist, yet the patient had never recognised its presence till I had pointed it out to her. Upon questioning the patient as to her history, I found that about twenty years ago she had received a severe injury or bruise on the left side by a fall, from the effects of which she soon recovered. This was the only thing that I could ascertain as having the least connection with the tumor.

The treatment adopted at this stage was simply hot stupes to the abdomen, and opiates. With regard to a diagnosis, I did not feel there was enough ascertained, or even ascertainable, to warrant it, and so resolved to wait the issue of events. I may say that there were no indications, nor history, of cancer. The position of the tumor showed that it could not possibly be ovarian. It was not connected with the stomach or spleen, as the latter organ could be detected of normal size, and the former was in good order. It seemed too much to one side to be connected with the omentum, and too high to be attached to the kidney; and, besides this, the urine was apparently normal in color and quantity, and the patient had never complained of the slightest nephritic symptoms. By the 25th of April the tumor had so increased in size that it was as large as a head and occasioned difficult respiration, in addition to severe pains in the part, and general constitutional disturbance. On this day, Drs. Hingston and F. W. Campbell saw the patient with me, and, after a thorough examination and discussion of the case, we came to the conclusion it must be a partly fluid and partly solid cyst, but not connected with the ovary.

On the 26th, Dr. Burnham, of Lowell, Mass., the well-known ovariologist, saw the case with me, and, after he had thoroughly examined the patient, he could not determine the nature of the growth, but thought it was probably a blood tumor; he ventured this opinion from the fact of the tumor being partly

solid and partly fluid, and its rapid growth and position in the cavity. The solid part of the growth, by deep pressure, could be detected below and to the inner side of the enlargement. This fact had been recognized, as already stated, by myself and also by Drs. Hingston and F. W. Campbell. Dr. Burnham agreed with us, that the feeble state of health, the age of the patient, and the uncertainty of the diagnosis, precluded the idea of abdominal section. I may here state that Dr. Burnham had a case very similar to the present one, where he undertook to operate for ovariectomy, and, upon making his incision, found that the tumor was an hematocele, the walls of which he could not ascertain. He incised the tumor, evacuated its contents, closed the abdominal cavity, and the patient made a good recovery.

To return to this case, however, I may say that by the 28th of April the tumor had enormously increased. The patient had had severe rigors, her breathing was greatly interfered with, and her sufferings were so great and urgent as to demand relief. In the afternoon, Dr. F. W. Campbell saw the case with me again, when we determined to draw off the contents of the cyst, which (we judged) would be probably purulent on account of the preceding rigors.

A medium-sized trochar was introduced about half way between the umbilicus and cartilages of the ribs, about three inches to the left of the median line, and a little below the most prominent part of the tumor. The withdrawal of the trochar was followed by the discharge of about thirty ounces of a clear, pale, straw-colored fluid; after which, about the same quantity of pus came away, and the canula was removed. The solid part of the tumor was now quite perceptible, and appeared to be about the size of a large fist. This operation was followed by such a severe shock that I feared for my patient's life. In a short time, however, she rallied, and passed a tolerably comfortable night, and the next morning declared she had not felt so well for months past. The patient now enjoyed a few days of respite, when the tumor once more began to enlarge, and soon attained its former dimensions. On the 15th of May the enlargement so seriously interfered with respiration and ingestion, that a repetition of the operation of tapping was urgently called for. On this day, Drs. Hingston and F. W. Campbell saw the case with me, and as there was no difference of opinion as to the necessity of the operation, it was performed in the same manner as before, and with the discharge of the same quantity and characters of fluid, except that a few flakes of albumen and

clots of blood came away with the last few ounces of pus.

The patient did not suffer from such severe shock as followed the first tapping, and, with the aid of an opiate, passed a comfortable night. Her health and spirits improved much, and she was able to take a fair quantity of food, a thing she had been unable to do for months past.

The most pleasing feature of this case now, however, was that the cyst did not refill to any inconvenient extent; and that the solid part underwent a gradual process of absorption, and during the following ten months entirely disappeared. The general health so improved that, in the course of three weeks, she was able to move round the house once more. Everything went on most satisfactorily for a few months, when, unfortunately, the patient became the subject of religious melancholy; and, although her general strength warranted out-door exercise, nothing could induce her to leave the house; she not only would not take a walk, but refused to enjoy the fresh air in a carriage. I need hardly say that her general health soon began to fail; she refused her food; grew more and more melancholy and suspicious, rapidly lost flesh, and became a living skeleton. During the months of March and April she complained of her food sticking in her throat, and could swallow fluids only. During the last thirty-five days of her life, she took no nourishment whatever, and the last five days not even a drop of water passed her lips. By the end of April, 1872, emaciation had reached its extreme limit, and death supervened on the 6th day of May. About two weeks before her death she passed some purulent matter, but, as I could not ascertain its origin, I supposed it to be leucorrheal.

The postmortem examination was made eighteen hours after death; my friend, Dr. Kennedy, kindly assisting me. Inspection of the body shewed emaciation had reached beyond anything we had ever seen. The anterior wall of the abdomen seemed to rest upon the vertebra. There was no indication of the presence of the tumor to either eye or hand. Rigor mortis not well marked. Upon making abdominal section, the contents of the cavity were found to occupy little space. The *liver* was small, but otherwise in a normal state. The gall bladder was greatly distended with gall, and contained a quantity of cholesterine crystals.

The *intestines* were nearly empty; the small ones, containing some dark faecal matter, occupied the pelvic cavity. Pedunculated nodules, about the size of a common pea, projected here and there from the surface of the bowels, but these were found to be

filled with dark, condensed faecal matter, and communicated with the cavity of the bowel. The transverse and iliac portion of the colon rested over the upper strait of the pelvis. The calibre of the intestines, as well as that of the oesophagus, was greatly reduced, especially the latter, which accounted for the difficulty she experienced in swallowing during the latter part of her life.

The *stomach* was so contracted that its utmost capacity could not be more than one and a half ounces; the walls of this organ, however, appeared to be as thick as usual.

The *omentum* was found to be intensely congested.

The *uterus* and *ovaries* were much smaller than usual, but otherwise perfectly normal. *Spleen* normal.

Pancreas was found to be of firm consistence, yellowish color, and apparently undergoing fatty degeneration.

Thoracic viscera were normal.

Brain—Meninges injected; slight deposits of lymph on pia mater and in the sulci; also serous effusion under arachnoid; general softening of the substance of the brain.

Kidneys—Right kidney normal. *Left Kidney* was found to be contracted, with the capsule strongly adherent to its surface; corticle much atrophied; tubules normal. The pelvis of the kidney was much enlarged, and contained some purulent matter. The *ureter* of the kidney, at the point of its union with the pelvis, was found much dilated, and to have formed with the pelvic cavity, the sack of the original cyst. The marks of the trochar are quite visible, shewing the point where the sack was penetrated at each tapping. There is one remarkable feature connected with this specimen, which I now exhibit, and that is the peculiar valve-like way in which the ureter communicates with the cavity of the sack. As you see, the pressure of the fluid in the sack effectually closes the outlet. This fact explains how it was that attention was not drawn to the kidneys at all during life, and also why a purulent discharge (very slight) was present near the close of her life. During the period the organ performed its function, the urine could not escape on account of the valve that shut it off from the ureter; and it was only after its secreting power was destroyed, and the distended sack evacuated, that any of the pelvic contents could escape by the ureter.

With regard to this tumor of the kidneys, I may remark that they are very rarely met with. Dr. Bright (p. 212) reports a case of abdominal tumor being due to pus distending the pelvic cavity, the

patient having been the subject of previous inflammation of the organ. In this case, however, the cyst extended almost to the iliac region, and was not nearly so prominent or high as in this case. The same author relates nine other cases, in all of which there are symptoms pointing to kidney disease, recognized during life. In speaking of this subject last summer, to Dr. Keith, he told me that he had seen but one such case in his practice.

Montreal, Oct., 1872.

Case of Imperforate Hymen. Operation and Recovery. By JOHN BELL, A.M., M.D.

(Read before the Medico-Chirurgical Society of Montreal, Nov. 16, 1872.)

B. W. first came under my care in August, 1871, suffering from ammenorrhœa. She was then 18 years old; had always lived in the country; was of medium height; tolerably well built; breasts not large; eye, hair, and complexion dark—the latter pale and somewhat sallow; in manner diffident, reticent, and apparently somewhat stupid. Has suffered since childhood from headaches, backaches and vomiting. Has never menstruated, and has had no recurring symptoms, which could be said to be an abnormal manifestation of this phenomena. Ferruginous tonics were prescribed, and directions as to exercise and diet were given.

A few days after this she got married to a farmer, and went back to the country to live. In a few weeks after this event all the symptoms became aggravated, the lassitude, headaches, and pain in loins and thighs, and she became still more depressed, on the discovery of a tumor, protruding between the labia, which some old woman asserted to be a displacement of the womb, and was a warning to avoid all doctor's medicines, as this had been brought about by the strength of the remedies which she had been taking.

She returned to me again on the 3rd of October last, having remained in the country during the intervening fourteen months, and suffered constantly from the above symptoms. On examination, the tumor between the labia presented itself as a rounded conical protuberance, of a little more than an inch in length, occupying the position of the hymen, and very much resembling a glans penis. It had along both sides slight markings, which met above or below, including an elliptical space, and appeared as if they represented a third pair of lips or *labia minorâ*. In the centre of the space, and at the apex of the tumor, was a small depression, like the meatus urinarius of the male. On pressure, the tumor easily

collapsed, and the finger could be introduced so as to completely invest it, to its fullest extent, into what seemed to be a well-bounded cavity of some kind. The urethra was so much dilated as to admit of the introduction of the little finger. The finger on the urethra could be very easily felt by the finger on the rectum, so that there appeared to be no more tissue than that of the urethra and bowel, and yet, as the vagina was there, it will be seen how thin the walls at this part must have been. Through the walls of the abdomen, a hard rounded tumor, of about four inches in diameter, could be felt above the *os pubis*, and inclined to the right of the median line. The lower part of this tumor could be felt through the rectum, low down on the pelvis, of a hard, rounded, and somewhat ingise character, giving the impression to the finger that the walls of the uterus were not only strongly distended with fluid, but that they were also firm and thick themselves.

On the 4th of October, Dr. McCallum saw this case with me, and we proceeded at once to introduce a small canula and trocar through the septum, when a quantity of tawny fluid, like treacle, of a dark brownish color, quite devoid of odor, appeared. A crucial incision, across the whole diameter of the hymen, was then made, when about a quart of the above fluid came away without any pain, and the tumor in the belly subsided on the introduction of the finger; the vagina felt soft and pliable, for about two inches up, where it became thick and hard, as if the muscular layers had become hypertrophied, in endeavoring to expel the accumulated fluid. A plug of oiled lint was introduced through the wound, and the patient instructed to remain quiet in bed, to allow more of the fluid to drain away. She felt greatly relieved, and appeared bright and comfortable next day. On the second day after the operation (October 6th,) she was feverish, but with no local pain. She was troubled with a severe cough at this time, and got but little sleep on account of it. A liquor ammonia acetates and ipecac. mixture, with a weak solution of Condry's fluid for injection per *vaginum*, completely relieved these symptoms in a couple of days, and she would no longer remain in bed. The aperture was occasionally stretched by the introduction of two or three fingers, until the edges of the wound healed, which took place in about ten days. She then left for home, and has been quite well ever since.

It is singular that the accumulated menstrual fluid, which has, in many of these cases, been pent up for many months, and even years, in such close proximity to the rectum, should not have the slight-

est odor. In this case, there was no trouble whatever from the chief source of danger in this operation, viz., the entrance of part of the accumulated fluid into the peritoneal cavity—forced either through the free extremities of the Fallopian tubes, or through ulcerations in their thin and distended walls, by the great expulsive force of the uterus, which, contracting down, closes the apertures of communication with the Fallopian tubes.

This deformity, in some cases, seems to have an hereditary tendency.

1, Beaver Hall Terrace,

Nov. 16, 1872,

THE THERAPEUTIC VALUE OF ALCOHOL.

BY DR. W. E. BESSEY.—(Continued.)

Dr. Ainstie calls alcohol an anæsthetic such as chloroform or ether, adding that it is an acrid narcotic poison. Now, what is the effect of anæsthetics when freely used? Dr. F. H. Hamilton, inspector-general of the U. S. army, during the late war, thus wrote (1865): "Anæsthetics produce certain effects upon the system, which tend to prevent union by the first intention, and, consequently, they must be regarded as indirectly promoting suppuration, pyæmia, secondary hemorrhage, erysipelas, and hospital gangrene. We are compelled to say that our success in capital operations, especially in primary thigh amputations, has not been as good since we began to use these agents as it was before." Therefore, if alcohol is what Dr. Ainstie claims for it, then it must, from its extensive use, promote a vast amount of diseased action in the system.

Dr. Markham, in the *British Medical Journal* (1861), thus accounts for the erroneous opinions of the day. "Medical men had been stimulated to the modern extensive use of alcoholic drinks in disease, and in health, by chemical theories. That these chemical theories upon which they founded their practice have at length been found untenable, and, especially, that we have now at length come upon another chemical theory, which indicates that it is, to all intents, a foreign agent which the body gets rid of as soon as it can; that it is, in fact, something like chloroform, ether, &c., (Chambers, Ainstie,) agents fraught with blessings to humanity, but yet admitted to rather tend to poison than to feed the body of man. Alcohol is not a supporter of combustion. It does not prevent the wear and tear of the tissue. Part and probably the whole of it escapes from the body, and none of it, so far as we know, is assimilated or

serves for the purpose of nutrition. It is, therefore, not a food in the eyes of science."

Dr. Budd, F.R.S., in his lecture on functional disorders of the stomach, thus speaks of gastric irritation, one of the morbid conditions present in gastric fever (*Medical Times*): "The most effectual remedies are, (1) sedatives, and other means which lessen the irritation from which the gastric disorder springs; (2) alkalies and astringents. The diet should consist chiefly of milk and farinaceous food, and little should be eaten at a time. *Alcoholic drinks* and all stimulating articles of food seldom fail to aggravate the disorder, and should be strictly forbidden."

The recommendation of alcoholic beverages as remedies is the common practice in Montreal, and the *stimulating plan* or the administration of alcoholics, as wine, brandy, whiskey, gin or ales, is the practice in vogue in the Montreal General Hospital, in which institution according to the last (corrected) annual report the mortality rate, in typhoid fever, out of a total of 49 cases was 8—or 16.3 per cent. less than that of the European Hospitals generally, where the average mortality rate, in this disease, is about one in 5.4 or 18.53.—(Murchison.) to one in 6—or 20 per cent (Aitken, Harley,) but greater than under the non-stimulating plan, as pursued in Glasgow hospitals, where it has fallen from 17 to 10 per cent.—(Gairdner.)

Some allowance, however, must always be made for variable hygienic conditions, and in this instance for the lack of perfect sanitary arrangements in the present Hospital buildings, and also for the uncertain ages of the 49 patients referred to in the report, the mortality rate among old persons being always much greater than among the young, amounting in some cases to 60 per cent.—(Murchison.) The general mortality rate of the Hospital for the year was 9.38, which, owing to the epidemic of confluent small pox which prevailed in the city last winter, was unusually large.

Hartshorne gives 1 in 20, as the probable death rate in this disease. My own opinion is that under favorable hygienic conditions the mortality rate in this disease should not be more than 5 per cent.

But then the stimulating plan is frequently adopted in other diseases in private practice. I have had two illustrations of this in children this summer. In one case a child had been weaned for several months on account of the mother's inability to continue nursing. At first, as was natural, the child declined in appetite and refused its food. A medical gentleman was consulted, and recommended the mother to give the child brandy with

milk, which the mother did. The child did not flourish, but remained delicate, emaciated, and suffered greatly from irritability of the stomach and bowels. On being consulted I advised a discontinuance of the brandy, and to give the child plenty of hot milk, with barley broth and simple broken cracker. In a few days the irritation had passed away, and the child was beginning to improve. Another case occurs to my mind, while writing. I saw a child a few weeks since, aged sixteen months, that had been suffering from summer diarrhoea; another medical gentleman had been consulted who recommended *plenty of port wine or brandy* with Martin's Cardinal Food. The mother did as directed; the child continued bad, in fact grew worse. She consulted another, who recommended ale with milk diet, and gave mist creta co. This treatment also failed, and the parents, expecting to loose the child, who was now much emaciated, with violent dysenteric symptoms present, asked me to see it when passing. I recommended *total abstinence from alcoholics*, and to give it plenty of hot milk only as diet, with a three grain powder of hyd. c. creta every twelve hours for first day or two. This child recovered in five days from the dysenteric symptoms, and is since doing well; to my mind in these cases the *alcohol* prescribed proved a cause of irritation, and interfered to a most serious extent with alimentation.

Thus, as it appears to me, alcoholics are not only unnecessary as remedies in the treatment of general diseases, but the advantages claimed from their use are at best questionable, and in the great majority of cases their administration can be proven to be positively pernicious. Even many of the former advocates of alcoholic medication are of themselves abandoning their use in all cases except those, of extreme prostration and in nursing mothers (upon which latter subject I may have some thing to say in a future article.) Its therapeutic influence has been amply proven, on the most indubitable authority, to be the opposite of valuable in affections of the nervous system (except, according to Ainstie in neuralgic pains, where chloric ether is preferable), alimentary canal, lungs, blood, liver and kidneys, and in fact a true bill has been found against it as an agent calculated not only to aggravate most diseases but also to create in many cases serious complications, and largely increase the rate of mortality.*

* The effect of alcohol when taken into the system has been proven by the experiments and microscopic observations of Schultz, Virchow, Boecker, Ed. Smith, F.R.S., T. K.

The London *Lancet*, looking upon the subject from both a scientific and humanitarian point of view, says: "There is no doubt as to the erroneous influence which as a profession we have had in creating the public opinion that exists as to the use of beer, wine and spirits." "A very great amount of good would be done if medical practitioners never prescribed alcoholic stimulants without indicating a certain quantity, and erring on the side of moderation."

"Not only should there be precision of language in prescribing stimulants, but we should seriously ask ourselves, in every case, whether it is necessary to give the sanction of our special prescription to them. Unquestionably there are many diseases in which they need form no part of our treatment.

"Then there is need of courage in medical men to be *candid and firm in positively discouraging* the use of alcohol, or of the popular forms of it in many cases. It is lamentable to see young men loosing their appetites, and getting short-winded, and prematurely corpulent under the notion that bitter beer is a real tonic, or to behold a lady relieve her various pains with sips of hot gin or brandy.

Chambers, Lallemand, and others, to vitiate the secretions, to impoverish the blood by altering the character of the red corpuscles arresting their development, and increasing the ratio of leucocytes, or white corpuscles, (bioplasts of Beale,) from the normal proportion of 1—50 of red corpuscles to 1—4—which may be regarded as defunct bodies no longer capable of conveying oxygen to the system; less oxygen is absorbed, less carbon exhaled. The fatty matters are increased, the vital plasma itself loses a portion of its vitality, and becomes capable only of developing a low order of tissue, and may even become so altered in character as to become an irritant to the circulating and secreting organs, and utterly unfit to promote the healing of wounds and injured parts.

Or, if we take the *hypothesis* of Dr. Beale, and consider the elementary form of all tissue, one or another form of Bioplasm, then it is against the vitality of this elementary structure that alcohol directs its influence, and by lowering its vitality in just proportion with the degree of its concentration produces in some cases a vital Plasma or Bioplasm incapable of developing a normal structure, and in other cases an abnormal action or a positive retrogression, or death, so that the very substructure necessary to the development and repair of healthy tissue is impaired or destroyed, and becomes in itself the germ of disease.

M. Kraus of Vienna, gives as his experience that sparkling wines are very injurious. Champagne not only increases the secretions, but in an extraordinary manner the phosphates. And the conduct of the medical men who advise its use in calculous cases, is *irrational and unjustifiable*. He considers that lately-brewed malt liquors are injurious, because the fermenting particles penetrate the mucous membrane and give rise to a greater or less degree of chronic catarrh. And English ale is open to the same objection in consequence of its richness in alcohol, and the great quantity of carbonic acid it contains.

Medical men should be explicit in their attempts to dispel these delusions."

Some time since I was much struck with the force of the following sentiments uttered in my hearing, by a lady in good society in this city. She said "If Doctors knew the terrible amount of harm they are doing by ordering their patients, especially ladies, to take beer, wine and spirits, causing, many to become fond of it, and to become addicted to habits of tippling, they would hesitate before prescribing it." That such a result has frequently followed its habitual use as a medicine, I am convinced, and I should be glad to see it discarded, and a class of remedies resorted to which could not prove worse or more fatal to the patient and to society than the disease itself.

I have known numerous cases in proof of this; and three lamentable instances in my own early practice are vividly impressed upon my recollection—two, the cases of married women who acquired the habit of tippling from the use of gin, prescribed medicinally by myself; and the other a young gentleman, who became a confirmed drinker from the use of bitter ale and porter, also prescribed medicinally. Nor am I at all singular in this, for other practitioners have made similar observations. This has been the case in the experience of Dr. Forbes Winslow, who asserts that during twenty years of practice, he has seen numerous cases of dipsomania (more particularly among women) which could only be traced to the injudicious use of stimulants, given in the first instance medicinally. He also dissents most strenuously from the stimulating theory of the late Dr. Todd, which like that of Mr. Skey, was based upon the assumption that all disease in one stage or another betokens debility, and that nearly all illnesses are preceded by, and, on critical enquiry, may be traced back to some depressing cause, some draught upon the bodily or mental health, which lowers the vital powers, and which in course of time, it may be days or weeks, may develop itself into an attack of illness of any form, and the large majority of which attacks are characterised by a weak pulse. "For this condition of (supposed) real weakness, says Mr. Skey, I prescribe wine as a prominent remedy, to be administered at intervals, more or less long, according to the necessities of the case." Now the above assumption itself any intelligent Physician must admit is pure empiricism, and the resulting theory incorrect, while the attempt to remove what Mr. Skey is pleased to assume to be "real weakness," by a "depressing agent," (which alcohol has been amply proven to be) is certainly a most fallacious and delusive theory of practice, which

too many really debilitated patients have experienced to their cost. Dr. Winslow also makes another important statement in point, when he remarks that "he had heard one of the most distinguished members of the Profession say after the death of Dr. Todd, that he was personally acquainted with many families who *cursed the day* that Dr. Todd entered the house" insinuating that chronic intemperance had been engendered by his too free administration of stimulants in disease. Dr. Wilks, of Guy's Hospital, condemns Mr. Skey's laudations of alcohol, and believes the teachings and treatment of the late Dr. Todd to have been "most pernicious" while he entirely dissents from the views entertained by the late Dr. Todd, Mr. Skey, and others who think with them, as to the necessity of stimulants in fever; and states that in his own wards in Guy's Hospital he treats fever *without stimulants* and *with the best results*. Dr. Wilks, in support of his action in signing the manifesto alluded to in the beginning of this article, instances the treatment of Bronchitis, especially, with stimulants, as *an error which kills many patients*, and deliberately reiterates as his opinion, that if alcohol is ever prescribed it should be *with the same care and judgment* as any other drug, such as iron, or quinine, and he might have added opium or arsenic, aconite or canabis indica. The truth is, that the more one chooses to enquire into the subject, the more palpable does it appear how erroneous is the presumed therapeutic value, and how false the estimate usually set upon alcohol as a medicinal agent. Many still prejudiced in favour of the utility of alcohol as a medicine, have been constrained, from clinical observation, to *condemn without hesitation or qualification* the practice proposed by Brown, of the last century, and introduced by the late Dr. Todd, of giving alcoholics in all diseased conditions, including acute diseases; while as to his (Dr. Todd's) alleged success in fever cases, it is well known, that the Physician to whom he entrusted the analysis of his Hospital Reports asserts [see British Medical Journal, December 9th, 1865] that the mortality from fever in the hospital attended by Dr. Todd was *much greater than that of any other fever Hospital in Great Britain*. Notwithstanding the accumulating evidence against the theory of *stimulism*, so-called, it is not a little surprising with what tenacity many still cling to it, and this too in the face of the most uncontrovertible evidence, as elicited from an examination of Hospital Statistics, as in the case of the London Hospital, and in the observations made by Drs. Gardner and Russell, in the Glasgow Hospital, shewing that even

the worst form of typhus may be successfully treated without it, and with a greatly reduced mortality rate. Dr. Hartshorne's observations upon this point are well worthy of reproduction here, Speaking of *stimulism*, as the theory and practice of Dr Todd, and now followed by too many others, he says: "It confounds three distinct propositions, 1, That all disease is debility: 2. That all debility should be treated by the use of stimulants; 3, That alcohol is always the best stimulant. Granting with some qualification the first of these, we emphatically deny the truth of the second and third; It is a practice which, like many other specialisms will have its day."

Now all this, and more, might be asserted against the alcoholic treatment—Dr. Ainstie to the contrary notwithstanding—who even goes so far as to make the monstrous assertion that "even a perfectly healthy adult will receive benefit from the use of at least an ounce of alcohol in some form or other daily," whereas the opinions of the most eminent members of the profession, and the daily experience of millions, go to show that perfect health can best be maintained with none, and which the recent experiments of Dr. Parkes go far to sustain.

That it produces serious disturbance of the whole vascular system, frequently resulting in disease of the heart and blood vessels, has been amply proven by the observations of Dr. W. B. Richardson, supported by the experiments of Dr. Parkes and Count Wolloweiz; shewing that the arterial system under alcoholic stimulation is like an engine working under high pressure, and is actually under an excessive tension equal to lifting 36 extra tons daily a height of one foot. The inevitable *break down* is sure to follow.

It is a somewhat significant fact to find in all instances where alcohol has been administered as a restorative in fever hospitals that the mortality rate has always been high. Notwithstanding the over-confident assertion of Dr. Ainstie (who by the way is rather singular in this) that "if the dose be moderate and the administration well timed (two excellent loop-holes in case of failure) the effect upon the nervous system is simply that of a restorative stimulant, sensations of fatigue are dispelled, the mind works more freely, (does it?) a healthy sense of warmth is diffused throughout the body; (this he contradicts in his lecture, before the College of Physicians, where he agrees with Dr. Ringer) and the arterial system acquires an increased tonic, if it was hitherto deficient in that quality." This he appeals to the sphygmograph of Mr. Marcy to prove, which experi-

ments with it by others contradict, as I have before stated. "If, on the contrary the dose has been immoderate, or administered at a time when it was not required, the pulse waves give a precisely opposite indication, that, namely, which proves that arterial relaxation has occurred and simultaneously with this, the pulse becomes abnormally quick." This last result is that which has been generally obtained where tests have been made by others.

To establish the relative success of the alcoholic or non-alcoholic systems of treatment in fever it would be very desirable to have the two plans submitted to a crucial test in our large Hospitals, when I am confident as to which will prove to be attended with the greatest success. And I base my assumption upon the fact, that since alcohol has been proven to increase the quantity of carbonic acid in the blood, and by interfering with elimination, to cause retention of effete material, (and it may be, poisonous germs that would otherwise be cast off) in that fluid, for there has also been noted the existence in the blood of large numbers of peculiar transformations of the liquor plasma and which recent Pathologists believe to be disease germs in reality,—at all events, effete matter, which but for the action of the alcohol upon the fluid would not exist, not being component parts of healthy blood—this may be undeveloped cell structure; and while a temporary stimulant, yet by repeated doses, it loses that effect and becomes a depressant; therefore, it cannot possibly be otherwise than hurtful in the treatment of such cases.

Dr. Hartshorne, while not entirely denouncing alcoholics in the treatment of Typhoid fever, recommends *Liquor Ammonia Acetatis*, as a diaphoretic, with liquid food. And says concerning alcoholics "*less than half the cases of Typhoid fever which I have seen have required alcoholic stimulation at any stage.*"

[Reasoning from Professor Lehmann's conclusions, Oxygen Gas, or Ozone, may be ranked among the best possible remedies for low forms of disease, such as fevers, &c., where it is possible to administer them. The former may be given in the form of oxygenated waters—two or three pint bottles daily, and the latter may be inhaled from jars filled with oxygen gas, through which an electric current has been made to pass, and which, therefore, contain electrolytic oxygen or ozone. The administration of these gasses in zymotic and other diseases depending upon the presence of a blood poison has long been a favourite idea with me, and I venture to hope that an opportunity may some day present itself for giving them an extended trial. For, I believe with Schonbein that "the exist-

ence of ozone in the atmosphere, and the prevalence of most forms of malarious disease (and also the cholera poison) bear an inverse ratio to each other; and that this will be found to be the case both as respects point of time and locality.

Electricity, in mild currents at first, carefully increased to suit the susceptibilities of the patient, will be found to be an admirable soothing agent in the low, muttering delirium, headache, and nervous excitability of patients endowed with a highly delicate and sensitive organization.

Spongings with Acetic Acid, especially over the head, spinal region, and great trunks of nerves, possess a singular efficacy in this disease, which hitherto has been unexplained.

Alcohol may be necessary to the Pharmaceutist, and indeed is, for there is no menstruum which can well supply its place, although extreme men have gone so far as to propose a substitution of aqueous solutions for tinctures, and emulsions for solutions of gums in spirits. Dr. Attfield, London, advocates the substitution of Aqueous Solutions for tinctures in several instances. I hold, however, that alcohol, in the form of alcoholic beverages, should never be prescribed where they can be substituted by other less dangerous and more effective remedies, because of the seductive and dangerous character which attaches to them. This rule I observe in practice.

The various kinds of alcoholic beverages in use at present, occasions each its own peculiar appearance of the skin. Thus, brandy flushes the face; beer induces a livid hue; rum reddens the nose; gin produces paleness; whiskey—which is only alcohol and water—does neither; and the wines act differently: some causing redness of face and papular eruptions on skin, others causing paleness, and some, the light wines, doing neither. All this may be explained by the nature of their combinations. Brandy, for instance, is spiced with aromatics, which being stimulant, cause redness of surface, in expulsion. Gin is medicated with diuretics, and are carried off by the kidneys, and drawing away from circulation of skin cause paleness. The various kinds of malt liquors occasion at first a dark flush of crimson, becoming finally livid, and eventually inducing a general puffy or dropsical condition. And all this, some would have us believe, promotes health, and is conducive to longevity, a connection which is difficult to appreciate.

There are, however, good offices which alcohol is capable of performing as a therapeutic agent, destructive as it undoubtedly is as a toxicant: when carefully restricted within the limits of its stimulating action, and when administered only in cases

where there is no acute, organic, or wasting disease present to contra-indicate it, and where the system may be considered capable of taking care of itself when once aroused into action. It is possessed of three distinct degrees of action, according to the strength and frequency of the dose, (it being a cumulative poison) and the degree of susceptibility of the patient. Thus it is (1) a stimulant, (2) an anæsthetic (3) a narcotic.

As a stimulant, alcohol must be ranked with Opium and Haschish or Cannabis Indica; drugs which are capable of producing mental excitement. When a dose is administered by way of experiment it is found to disturb the mind, in five to seven minutes; in ten to fifteen minutes there is hilarity of spirits and talkativeness, which may continue for twenty minutes, when it is gradually succeeded by a dreaminess, which passes gradually into drowsiness and stupor if the dose has been large, or into returning consciousness and clearness of intellect if the dose has been limited. In consequence of its varying influence and the rapidity with which one condition passes into another or that succeeding, it is vastly inferior as a stimulant to ammonia, either in the form of carbonate, muriate, aromatic spirits or the liqr. ammon. acet.—all of which act as pure stimulants, and unattended with any sedative, treacherous intoxicant, or dangerous narcotic action; while as an anæsthetic or pain destroyer, it is inferior to chloroform.

A spirituous liquor has been prepared from tea or theine, which is called Robur, a Latin term denoting strength. It is claimed for this spirit that it possesses all the stimulating qualities of ardent spirits, without the after depressing or anaesthetic and narcotic properties. Should this prove to be the case it will be a God-send for the advocates of spirits, although it may not prove all that it is claimed to be, and even so, a worse evil may attach to its use, as in the case of *Absinthia*.

It is quite clear however that, in order that alcohol may be rationally prescribed, (when its use has been decided upon) it is absolutely necessary that certain conditions should be observed. *First*, the nature and percentage of alcohol contained in the beverage (or mixture) must be known, which at present is rarely the case, and it must also be known to be free from adulteration; * *2nd*, the exact condition of the

* The strength of alcoholic beverages, or the percentage of alcohol which they contain, may be determined in four ways. *First*, by the use of *Sikes' Hydrometer*, which, for testing the strength of alcoholic liquids, is graduated to indicate the number of parts of pure alcohol in a hundred parts of

patient at the time of administration, as well as the time and mode of giving it, with all the proper tests should be reduced to a system or science as is the case with the administration of other drugs, else the prescription is mere empiricism; and, where it forms part of a plan of Hospital treatment, a careful and comprehensive set of observations should be made with regard to its administration in various classes and conditions of disease, to shew the beneficial results, if any, obtained from the practice in the way of more perfect recoveries and lessened mortality, or the opposite; else the whole system of alcoholic medication is a tissue of fallacy, and based upon suppositions and deceptive theories which have not their demonstration in fact, and are, therefore, mire and quicksands to those who put dependence in them.

Alcohol used externally to fresh wounds, cuts and amputations, affords a valuable dressing by its power of solidifying the albuminous tissues, thus forming a superficial covering better than collodion. It may be useful also in cases of temporary prostration, where there is no actual wasting disease, and in great and sudden prostration from severe mechanical injuries, and in *syncope from sudden loss of blood*, (as after some operations, in uterine hemorrhage, &c.,) fright, or from a sudden violent effort, but a continuance of the remedy would invariably produce increased weakness. If given during the chills of ague, they only increase the reaction or fever, and in diarrhoea or dysentery, if they do not at once relieve, they are sure to aggravate by increasing the irritation in the gastric or intestinal mucous membrane. Dr. Paris (author of *Dietetics*) says: "their habitual use induces more than half of all our chronic diseases." They are often taken for weakness to give strength, and many feeble persons, especially ladies,

liquid. Absolute alcohol being 100, and water 0. This is the most convenient plan; or by Beaumé's, or the Pharmaceutical Hydrometer, which indicate at the same time, the specific gravity and percentage of alcohol by weight at a temperature of 15° c., or 60° fh. Second, by the *Vaporimeter* of M. Gresler, Bonn, which indicates the amount of alcohol by the tension of vapour at a certain temperature (173°) from the fluid containing alcohol, forcing up a column of mercury. Third, Dr. Parkes' method by the process of evaporation and the use of a urinometer. Fourth, by the alcoholometer, as used by Ure.

The percentage being ascertained it is easy to calculate the dose of absolute alcohol administered by the rule of three as follows. A bottle of sherry, 3 half pints, containing 24 oz., of a strength of from 15 to 25 per cent. Say 20 per cent. Then as 100 : 20 :: 24 = 4.80 oz. of absolute alcohol in 24 oz. Now in each wineglass of 2 oz., this would give .40 of an oz. of absolute alcohol administered in each wineglass of such wine. And so with other beverages.

have been taking wine, beer (ale or porter) or spirits for years to strengthen them, and still they are as feeble as ever. The remedy in such cases is discontinuance of stimulants, and substitution of wholesome plain food, at proper times, and regular intervals. They have been given during convalescence to promote recovery, with what benefit multitudes who have watched the recovery of patients with and without them can testify. These recover only so rapidly as the food which they eat is assimilated or appropriated, and this is never improved by alcoholic stimulants. Besides, there is no class of remedies so much misused as are alcoholic stimulants, which have been made by many almost a *universal panacea*. In concluding I repeat, that in no disease has their use been more abused than in fever. It is true that there are conditions in typhus fever, and frequently in typhoid fever, where a stimulant becomes necessary, but in such cases, in my opinion, the preparations of ammonia are more safe and certain, and much easier controlled. Besides they do not interfere with the absorption of milk or other nutritious aliment. In short, there can be no doubt that alcohol is contra-indicated in all diseases dependent upon the presence of a *blood poison* for their cause, and which are invariably of a depressing character, as in typhus and typhoid, the exanthems, erysipelas, &c., &c. These diseases require an eliminative and supporting or restorative plan of treatment, of which alcohol cannot from its nature form a part.

In preparing the present article, I have kept a two-fold object in view, namely, while advocating my own opinions to reproduce the views and observations of others who view the subject in the same light.

I have thus inquired at some length into the most important conditions under which alcohol is administered, and I am unable to arrive at any other conclusions than that alcoholic stimulants, in most cases, are neither specially valuable nor indispensable but on the contrary, are most deceptive and illusory adjuncts to the ordinary treatment of disease.

The time is coming when the alcoholic medication theories of to-day, will be classed among the greatest and most indefensible medical errors of the past.

EDITOR MEDICAL RECORD.—Dear Sir,—Since writing the article now being published in your periodical, in which I quote the statistics of the last report of the Montreal General Hospital, giving the death rate in Typhoid Fever as 28 out of 69 cases, or 40.58 per cent, I have been informed by Dr. Howard, secretary to that Institution, that the report is not correct, and that 8 is the correct number out of 49, not 28 out of 69, as appears in the report. A

result, by the way, which does not accord with the experience of other Hospitals where the stimulating plan is pursued, and which does not affect in the slightest my opinion of this plan of treatment, inasmuch as it gives 8 deaths out of 49 cases, or 16.3 per cent. which leaves a margin of 6 per cent, in favor of the non-stimulating plan as pursued in the Glasgow Hospitals. I am glad to be informed that owing to the last portion of my article having been unavoidably held over, it is possible to correct the original text. This you will oblige me by having done in accordance with the data furnished.

By doing this, you will greatly oblige,

Yours, &c.,

W. E. BESSEY, M.D.

P.S.—Dr. Howard, in a recent letter to the *Witness*, gives the number of admissions for Typhoid Fever during the 10 years immediately preceding 1871-72 as 385, and the number of deaths as 36, giving a mortality rate of 9.35 per cent. This result is so exceptionally favorable for the Alcoholic plan of treatment in Typhoid Fever that I venture to affirm that if the two systems of treatment be subjected to a crucial test in the same Hospital, on patients of the same class, and under the same conditions, alcoholics being administered to one lot, and *ammonia* as a stimulant to others, with milk diet, it will be found that the alcoholics have sadly suffered by the comparison.

Communication.

To the Editor of the CANADA MEDICAL RECORD:

SIR,—Although a young practitioner I have been a member of the Medico-Chirurgical Society for some time. Medical Societies are the source of a great deal of benefit both to old and young members of our profession, but I am afraid such is not the case with us. Some members are too fond of epitomising articles from standard authors and delivering their remarks as though they were addressing a body of illiterate men, much in the same way as a professor addresses freshmen.

Several times have I gone home and turned up Reynolds' system of Medicine, Holmes' Surgery, &c., and discovered the fountain-head of a long address, delivered as if it had been based on past experience. Such members ought to know that our Society is not composed of ignorant men, and that the meetings are not attended merely with the view of listening to recitals of eminent men's opinions by the lesser lights of Montreal.

The young Medical men of this city are essenti-

ally a reading class, and are quite conversant with most of the standard authors; and the meetings are supposed to be attended with the view of listening to each other's experience and profiting thereby.

I hope, Sir, such members may see the folly of their ways, and in future not bore men with matter with which they are already conversant.

Another thing also that strikes me as being rather odd, is the publication of operations in the daily papers. I remember once a Medical student, partially connected with the Press, was severely reprimanded for having inserted two operations of an eminent practitioner, but unconnected with any School. One was an excision of a portion of the clavicle, and the other was a shoulder amputation.

All is now changed, and the rule is to puff as much as possible. Lately there were puffs in two separate columns of a morning paper.

It is also very strange the two Medical Journals cannot report things alike. In reading the report of the last meeting in the "Canada Medical and Surgical Journal," one would almost believe the tumour had been excised, instead of only half; and the remarks of one or two appear twisted and turned into laudation of a dangerous operation, for the performance of which there was hardly an excuse.

The fact is, Sir, there is not sufficient independence among individual members of our Society, and too much of the mutual admiration element; and juveniles like myself are expected to look on admiringly.

I remain, Dear Sir,

DIOGENES, JUN.

Progress of Medical Science.

THE SYNTHESIS OF ACUTE RHEUMATISM.

BY DR. BALTHAZAR W. FOSTER, PROFESSOR OF MEDICINE IN QUEEN'S COLLEGE, AND PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

[The facts recorded in the following paper, when added to the arguments which have been adduced by Prout, Richardson, and other writers, will strengthen considerably the evidence which points to lactic acid as the poison of acute rheumatism.]

In the *British Medical Journal* of February 25th, 1871, I read with much interest an account of Dr. Cantani's observations on the lactic acid treatment of diabetes. At that time, I was engaged in completing an inquiry into the effects of different drugs on the sugar-excretion in diabetes. I determined to add one more drug to my list, and to complete my research by observing the effects of lactic acid.

A man (Wright) who had just come into the

General Hospital under my care, suffering from diabetes, offered me the opportunity. His age was 31, and he had been ill some four months before his admission. By trade he was an iron caster, and up to this attack of illness he had been a healthy man, and had never suffered from rheumatism. He was married, and had several strong, healthy children. On a mixed diet, he passed during the first week of his stay in hospital an average of 180 ounces of urine daily, containing 49 grains of sugar in the ounces. On a strictly animal diet, continued two weeks, the sugar fell to an average of 36 grains an ounce, and the urine passed to an average of 116 ounce daily. The skin was dry and branny. The sugar excretion remained pretty stationary on strict diet, but lung-symptoms began to manifest themselves, and steadily increased.

On March 8th, I ordered the patient fifteen-minim doses of lactic acid dissolved in an ounce of water four times. The dose was doubled the next morning, and in the afternoon he complained of acute pains in his joints, and flying pains about his limbs. In the evening, as these pains had increased, the medicine was discontinued by order of the resident medical assistant.

On March 10th, no lactic acid mixture was taken, and the pains gradually ceased.

On March 11th, I saw the case; and regarding the occurrence of the joint-pains as a mere coincidence, repeated the lactic acid in fifteen-minim doses three times a day. On the evening of the 12th, he again felt pains in his joints; and on the morning of the 13th, "the small joints of the fingers of both hands, the wrists, and, in a less degree, the elbows," were noted by the resident medical assistant Mr. E. A. Elkington, to have become "red, swollen, and painful." On my visit I was much struck by the appearance of these joints, which were typical specimens of acute rheumatic arthritis. In the evening, both wrists, the small joints of the fingers, and the elbows were all red, hot, swollen, tender, and painful. The heart-sounds were clear. The temperature in the morning was 100; in the evening 101 F. He had moderate perspiration. Pulse 90, soft and full. The joints were wrapped in cotton-wool, and the lactic acid was discontinued.

On March 14th, in the morning, there was a decided improvement in all the joints; the swelling had much diminished, but heat and pain were still present. Temperature 100; pulse 84. In the evening, all the small joints of the fingers were much better. The wrists were still affected, and he complained of a good deal of pain in the knees, which had hitherto escaped. The heart-sounds were clear. Pulse 90. Temperature 100.8.

On March 15th, the joints were better. The temperature in the morning was 98.6; in the evening, 99.4.

On March 16th, he said that his arms were quite well; his legs nearly so. He had slept much better.

On March 17th, all pains in the joints were gone. Temperature 98.2. Pulse 72.

During the next twelve days, no lactic acid was administered. The case was put clearly to the man,

and, as he had felt benefit from the acid mixture and had passed less urine during its use, he elected to run the risk of acute rheumatism. Accordingly, on March 29th, I prescribed seventy-five minims of lactic acid dissolved in twenty ounces of water. This was to be taken as a drink in the course of twenty-four hours. During the next five days, no rheumatic symptoms appeared. The pulse rose twelve beats on and after the third day; the temperature, which had been previously elevated by the long complications, showed no marked change, but on the fourth and fifth days remained steadily at 99°, instead of varying as it had done for some time previously. On the morning of the sixth day (April 4th), he complained of having had a bad night from joint-pains, which had disturbed him very much, and which came on suddenly after midnight. On examination, the metacarpophalangeal and first phalangeal articulations of the first and second fingers of each hand were found to be red, swollen, hot, and painful; the slightest movement aggravated the pain, and he could not on this account pick up anything with his fingers. The pulse was 102. The temperature, which on the previous evening had been 98.2, had risen to 99.4. The heart-sounds were clear. The acid mixture was stopped, and in the evening the pain in the knuckles was less, and the redness had diminished; they were, however, still stiff. No other joints were affected. Temperature 99.2.

April 5th. His hands were much better, and of his own accord, he resumed his lactic acid drink, and took about thirty minims of acid in the course of the forenoon. In the evening the pains had returned in the knuckles, which were swollen, red, and tender. He discontinued the acid, had a fair night, and on the morning of the 6th, found his hands free from pain. He again resumed the lactic acid, and took up to 4 p.m. the remainder of the bottle, containing about forty-five minims of acid. In the evening at 9 p.m., the pain and swelling had returned in his knuckles, and his left wrist was also affected. He now gave up the acid for two days, and the joint-symptoms gradually disappeared.

The acid drink was resumed on the 9th, and continued to the 13th, but he only took about thirty-five minims of acid a day. He experienced no inconvenience except flying pains about his joints, till the night of April 13th, when he was disturbed by severe pain in the right wrist, which was found in the morning to be red, swollen, painful, and hot, and was a typical specimen of rheumatic joint. Pulse 98, full and soft. There was copious perspiration, of acid reaction. The heart-sounds were clear. The elbows and knees became painful and stiff the next day. The joints were all wrapped in cotton-wool as before; and in the course of four days nothing remained except a little stiffness in the right wrist. After a week's interval, the acid was again taken, with like results.

The man now had gained so much experience as to the first indications of a coming attack in his joints, that he was allowed discretionary power as to the time and manner of taking the mixture. By

trying it first in small doses, so as not to take more than twenty minims of acid a day, and stopping it for a day or so whenever the joints threatened, he managed to continue the acid for some weeks. Gradually he increased the dose, as advised, and early in June was able to take from forty to fifty minims daily. During this month, he had two sharp attacks of rheumatism in the hands and wrists. By the end of June he was taking seventy-five minims of acid daily; and on July 6th, this was increased to 100 minims. On the 7th, he began to experience considerable pain and stiffness in his joints, and kept his bed (he had been up daily previously) on account of the pain caused by walking. On the 8th, these symptoms were worse, and in the evening his wrists and elbows were very stiff and painful, but the knees were less so. The temperature had risen to 100·6. The acid was stopped. On the next morning he was better. Temperature 99. The joints were less painful and stiff; there was no redness and no swelling. On the 10th, he again took the acid, his joints feeling much better, and the temperature being only 98·4. In the course of the day, he took 100 minims of the acid; and by the evening the pains had returned in his wrists, elbows and knees. Temperature 100·6; pulse 100, full and soft; skin moist and perspiring. On the morning of the 11th, his right wrist was red, and swollen; the left less so. The knuckles of his right hand were also red, swollen and painful. His left knee was red, swollen and very painful and tender. He complained also of pain in the left side, but the heart-sounds were found to be clear; pulse 88; skin still moist. The mixture which had been stopped on the previous night, was discontinued till July 17th, by which date all the rheumatic symptoms had subsided. After this the man only remained in hospital seventeen days. During this period, he, of his own desire, resumed the acid drink, and on one occasion took as much as 125 grains of acid in the course of twenty-four hours. During the last fortnight of his stay in hospital, he had no severe pains in his joints, and whenever flying pains warned him, he discontinued the medicine for a day.

While the above case was under my care in the hospital, it so happened that another diabetic patient of mine, in visiting the wards, met Wright and compared notes with him. From him he heard such a favourable report of the acid treatment, that he requested me to order him the same medicine if I thought it suitable. I did so. A drink consisting of seventy-five minims of lactic acid in a pint of water was prescribed. Of this he took daily as much as contained thirty to fifty minims of acid; and on the fourth day he came to me complaining of a sharp pain in his right knee, which rendered the joint stiff, and made walking very painful. He also mentioned that he had less severe pains in his other joints, and expressed his opinion that he had caught a cold, which had produced rheumatism, a disease from which he had never before suffered. There was no swelling or redness of the knee or other joints. His skin, which had hitherto been harsh and dry, was soft and moist. The acid mixture was discon-

tinued, and in two days the pains had entirely ceased. During the next month, he made several attempts to take the acid mixture, but it was always followed in a day or two by pains in the joints. Early in May, he managed to take the mixture for a week, and then was laid up with such severe joint-pains, that I was called to visit him, and found him in bed with pains in his elbows, shoulders, ankles, and knees, and, as he said, all over him. None of the joints were swollen except the right knee, which was faintly red, decidedly swollen, and very tender and painful. The other joints were simply stiff and painful on movement. The skin was freely perspiring. Pulse 96, full and soft. The acid mixture was stopped, the joints were wrapped in cotton-wool, and alkalies administered. In the course of a week, all the symptoms had disappeared, and the patient was able to walk about, and resume his ordinary habits. This patient had never passed more than twenty-four grains of sugar an ounce while under observation. The excretion was generally not over fifteen grains an ounce.

Remarks.—The above record contains an account of the joint-symptoms which were observed in two cases to follow the administration of lactic acid. In the first case, at least six well marked arthritic attacks occurred; in the second case, under conditions less favourable for observation as to duration of treatment and place, one well marked attack occurred. The phenomena corresponded in all respects to those which are characteristic of acute articular rheumatism. They came on when the acid was taken, and ceased when it was discontinued. When moderate quantities of the acid were tolerated, an increase in the dose was succeeded by the painful inflammation of the joints. Coinciding with the development of the articular affection was the appearance of perspiration, at first only slight, but afterwards, in the more severe attacks, copious and acid.

These facts have dispelled the last lingering doubt in my mind as to the truth of the lactic acid theory of rheumatism. At first I doubted the connection between the administration of the acid and the production of the rheumatic phenomena. In my scepticism, I regarded it as an accidental combination. The recurrence of the joint-symptoms, however, on March 13th, following distinctly on the repetition of the lactic acid mixture, shook my disbelief. The coincidence of joint attacks with the use of the drug might occur once, and I thought even a second time; but, when I found it occur over and over again, there was no room left for the hypothesis of coincidence. To refer Wright's attacks to a series of accidental combinations requires, in my opinion, a much livelier faith than to accept the lactic acid theory of acute rheumatism. If to some Wright's case presents not evidence enough in the beautifully typical character of the artificially produced disease, and in the precision with which it could be manufactured at the will of the experimenter, then the second case comes in to refute any explanation founded on the assumption of an idiosyncrasy on the part of one patient.

In health, no doubt, much larger quantities of lactic acid than any given in my cases would be excreted without producing any perceptible disturbance in the bodily functions. The acid would escape by the skin, the kidneys, or, after oxidation, as carbonic acid and water. It cannot be justly argued that the quantities of acid taken by my patients were too small not to have escaped in this way. The conditions under which the drug was given must be borne in mind. In diabetes we have a state of suboxidation very unfavourable to the conversion by oxidation of new compounds; and in Wright's case this was aggravated by the serious pulmonary complications. Associated with these, there was a dry and branny state of the skin highly unfavourable to the elimination of the lactic acid by one of the common channels. Lastly, the well known persistent acidity of the urine in diabetes points to a pre-existing hyperacidity of the fluids. These considerations are, I think, important, as defining the conditions under which the experiments were made—conditions most favourable to the development of the specific effects of the lactic acid. It was the combination of all these which rendered Wright so susceptible to the action of the drug. By the absence of one of them (the lung-complication), and the minor degree of glycosuria, we may probably explain the slighter susceptibility in the second case. The larger doses of acid which Wright was able to take occasionally, towards the close of his stay in the hospital, find an explanation partly in his more careful management of the remedy, partly in an acquired toleration of it, and partly in the great improvement which occurred under treatment in the state of the respiratory organs and in the sugar-excretion.

I refrain for the present from discussing the bearings of my observations on the therapeutics of rheumatism. The effects of the lactic acid on the excretion of sugar will be considered, with other modes of treatment, in a future paper. In this communication, my object has been to lay before the profession facts which have an important bearing on the origin of a common and serious malady. If, by pointing out the nature of the poison of acute rheumatism, they help in the smallest degree to improve therapeutics, they will not have been observed in vain.—*British Medical Journal*.

ON NERVOUS OR SICK-HEADACHES.

By Dr. P. W. LATHAM, Physician to Addenbrooke's Hospital, Cambridge.

[The pathology of nervous or sick-headache is a defective supply of blood to some portion of brain, owing to contraction of one of the cerebral arteries, probably the middle cerebral. There is generally loss of tone of the cerebro-spinal system, from overwork, anxiety, or some similar cause. The headache is frequently preceded by a glimmering of some portion of the field of vision of one eye. If the patient will lie down this glimmering not unfrequently passes off or becomes much less intense, and the headache

which would have followed is averted or correspondingly modified.]

Let us consider separately the remedial measures to be adopted (1) during the stage of disturbed sensation, (2) during the stage of headache, and (3) during the intervals between the attacks.

1. *During the Stage of Disturbed Sensation.*—In the forms attended with disturbance of vision, you will find that in the same individual the longer this stage last, the greater will be the headache; and therefore we must endeavour to shorten it as much as possible. If the condition, then, depend upon deficient supply of blood to a part, such means must be adopted as shall assist and increase the flow of blood to the part; and this can be done in some measure by posture and stimulants. Directly the glimmering appears, the patient should lie down with the head as low as possible, and if the glimmering be on the right or left of the vision, he should lie on the *opposite* side. Let him take at once a full-sized glass of sherry; If at hand, half a bottle of soda water is a useful addition. Champagne would be preferable, being more diffusive; but its administration would often involve a little delay, and at the commencement of an attack it is a great point to save time. A large tablespoonful of brandy diluted may, if the patient prefer it, be substituted for the sherry. If alcoholic stimulants be objected to, or if it be not advisable to recommend them, then a teaspoonful of sal volatile in water may be prescribed instead. If the patient be chilly or his feet cold, the couch should be drawn before the fire and a hot bottle applied to the feet. By these means the heart is enabled to drive the blood with greater force to the brain, and the duration of the vibratory movement is thereby materially lessened. After it has passed off, the patient should lie still for a time, so that the glimmering may not return. This injunction will only be necessary when the headache is slight; if it be severe, attended with much nausea or vomiting, the patient will be little disposed or able to leave the recumbent position. If instead of the disturbance of vision preceding the headache, there be a feeling of depression or irritability, fidgets, &c., the administration of such cerebro-spinal stimulants as henbane, valerian, asafoetida, spirit of chloroform, or ether, will often cut short the attack; ten or fifteen drops of the tincture of henbane with the same quantity of spirit of chloroform, will soothe the nervous irritability in the slighter forms, and may be repeated in three or four hours, if necessary. If there be great mental depression, then valerian or asafoetida should be tried. Stille says: "Nothing is more astonishing in the operation of remedies than the promptness and certainty with which a dose of valerian or asafoetida dispels the gloomy visions of the hypochondriac, calms the hurry and agitation of nervous excitement, allays commencing spasms, and diffuses a soothing calm over the whole being of one who but an hour before was a prey to a thousand morbid sensations and thick-coming fancies of danger, wrong, or loss." I give the preference to valerian, and prescribe from half a drachm to a drachm of the ammoniated tincture. The asafoetida

may be given in the form of the spiritus ammoniæ fetidus of the *Pharmacopœia*, also in half drachm or drachm doses. As a rule, alcoholic stimulants are not advisable here. A small quantity will cause flushing, heaviness, slight confusion of thought, &c., without relieving the depression; and though the severe headache may be averted, alcoholic stimulants do not answer so well as the remedies previously mentioned.

2. *During the Stage of Headache.*—If the headache be slight and the patient soon able to sit up, there is little to be done; a cup of coffee or tea, cheerful conversation, a walk, drive or ride, may often help to remove the pain. If, however, the headache, nausea, &c., be severe then the administration of further remedies is called for. The patient should keep perfectly still and quiet, with the room darkened; for every sound or sight causes pain, and the slightest movement is sufficient to produce gastric uneasiness. Sometimes free evacuation of the contents of the stomach, especially if it contain undigested food, is followed by relief. Dr. Fothergill says, "an emetic and some warm water soon wash off the offending matter and remove these disorders," which may be very well where there is any offending matter to wash off, but it is not very often that this is the case; the nausea frequently continues long after the contents of the stomach have been discharged; an inverted action of the duodenum is set up; the bile appears in the fluids excreted; the patient believes that all his troubles are due to "its overflow;" "it's all liver," he says, and it is sometimes difficult to persuade him to the contrary. Generally, then, you should try to relieve and check the vomiting. Iced soda-water, with or without two or three drops of dilute hydrocyanic acid or spirit of chloroform; cold tea; the effervescing citrate of potash, with hydrocyanic acid, may often afford marked relief. The headache may be lessened by applying cloths dipped in cold water, or evaporating lotions to the head; if the extremities be cold and the headache severe, a warm stimulating foot bath can be tried so soon as the nausea will allow the patient to sit up. If the attacks occur in the early part of the day, as soon as the pain has subsided, it is generally better for the patient to sit up, or move about, or take exercise in the open air. A young lady, on consulting me for this disorder, said: "Nothing relieves these headaches except a good gallop on my pony. I have sometimes to lie still for three or four hours before the pain is bearable; but directly I am able, I mount my poony and always return home better." During the attack the appetite is diminished, the idea even of food provoking disgust. Still, after the nausea has passed away and the headache has continued a few hours, a plate of soup or some easily digested food will often have a good effect in equalising the cerebral circulation. A remedy which may very often be given with advantage if the headache be severe, is bromide of potassium in doses of 5, 10, or 15 grains, to which 30 or 40 minims of sal volatile may in some cases be added with advantage; and if the nausea still continue, these may be given in combination with the effervescing

citrate of potash. A saline purgative at the commencement of an attack is sometimes an effectual remedy; but, as a rule, the use of purgatives is objectionable.

So far, the measures which I have suggested are only palliative. We come now to the consideration of such as are preventive, or to the treatment necessary during the intervals between the attacks. First of all, you must try to find out the exciting cause and endeavour to remove it. Hours of study or work must be abridged; excessive bodily fatigue, loss of rest, everything in fact, must be avoided which the sufferers know from individual experience will act as exciting causes. Where the attacks are associated with excessive mental work, they should be regarded as danger-signals, showing necessity for relaxation. In the next place, you must endeavour to improve the tone of the bodily and nervous systems by proper medicinal and hygienic means; and the chief remedies which I employ are steel, strychnine, and cod-liver oil. The success, however, following these remedies depends a great deal upon the way in which they are administered. For a day or two after the attack the stomach and bowels may possibly be disordered, and not in a fit-state to tolerate such remedies. This must first be corrected. The simple vegetable bitters such as gentian, with small doses of henbane and some aromatic, may be of service, and, if necessary, one or two grains of blue pill, with four or five of compound rhubarb pill, may be given at night. We may then try steel. If the attacks have been very frequent, or if there be any scrofulous tendency, I give the iodide of iron in the following form. R. Ferri et ammon. citrat, gr. v; potassii iodidi gr. ij; 3j; and I add, according to circumstances, 15 to 20 minims of tincture of henbane, or 20 to 30 minims of aromatic spirit of ammonia. If the stomach be at all irritable, I give this in the effervescing form adding to each dose 20 grains of bicarbonate of potash, and directing it to be taken with a tablespoonful of lemon-juice or a corresponding amount of citric acid: the dose to be taken twice a day, about 11 and 4. I soon leave off the effervescing form, and then add to each dose five minims of liquor strychniæ, omitting the henbane and sal volatile, and continuing the iodide of potassium according as it seems to be indicated or not. In other cases, I give the citrate of iron and ammonia with strychnine at the beginning, and sometimes combine them with infusion of calumba. The iron is indicated by the greater or less anæmia of the patient; but the strychnine is, in my opinion, a very important remedial agent in the disorder. In small doses, it acts as a simple tonic, increasing the appetite and improving the digestion; it dilates the vessels, and thus increasing the supply of blood, it augments the activity of the spinal cord (Harley). It promotes the capillary circulation, and therefore its use is advisable for persons troubled with cold hands and feet (Anstie); and if it fulfil these conditions, it is clearly indicated in the disorder which we are considering. Cod-liver oil also often acts very beneficially. "It has been found by experiment that great exertion and prolonged labour can be endured

without fatigue when starchy and fatty foods are alone eaten . . . and there is reason to think that cod-liver oil is more easily absorbed than other similar substances" (Ringer). "It improves the digestive process, increases the proportion of red corpuscles in the blood, and invigorates the whole nutritive function" (Wood); and I believe it particularly sustains the energy of the brain during prolonged mental exertion. A gentleman in the foremost rank at the bar told me that, whenever he was engaged in a jury-trial which was likely to tax his energies to a greater degree than usual the thing which best sustained him was a good dose of cod-liver oil taken in the morning before going into court; and others engaged in mental work have confirmed this view. I therefore regard cod-liver oil as having, besides its other properties, a nutrient and tonic action on the cerebro-spinal nervous system. As a remedy for these nervous headaches, I only prescribe it once a day, beginning with a small teaspoonful immediately after breakfast, and gradually increasing the quantity to a tablespoonful, but not beyond, unless in exceptional cases.

You must take care to regulate the action of the bowels, but by no means have recourse to strong purgatives. Five grains of the Socotrine aloes pill, given at night are generally sufficient. If the bowels be habitually constipated, then no remedy seems to answer so well as the aloes and iron pill. Five grains given twice a day, half an hour before meals, will act freely; and in a few days you will have to diminish the dose, for the remedy possesses this advantage, that its effect is augmented instead of being lessened by continual administration, especially when strychnine is given at the same time. The natural waters of Friedrichshall or Marienbad may in many instances be of service, given as laxatives.

Besides the remedies to which I have called your attention, others have been recommended, such as arsenic and quinine, caffeine, &c. Where anæmia is not a prominent symptom, they may sometimes be of service.

Lastly, you must lay down stringent rules for your patients with regard to diet and exercise, and you must impress upon them the importance of these rules being strictly observed.—*British Medical Journal*.

DISEASES OF THE URINARY ORGANS.

TABLE FOR THE EXAMINATION OF URINE.

By Dr. J. CAMPBELL BROWN, Lecturer on Chemistry and Toxicology at the Liverpool Royal Infirmary School of Medicine.

I.—Observe the colour and appearance of the urine, whether it is clear or turbid, and whether it contains much mucus.

A high colour may be due to BILE, BLOOD or PURPURINE; a pale colour may indicate excess of WATER, and frequently also GLUCOSE.

II.—Observe the reaction to red and blue litmus papers.

Normal urine is slightly acid; if the reaction is alkaline, and the red colour of the paper is restored on drying it, the alkalinity is probably due to ammonium carbonate from the decomposition of urea; confirm by observing whether effervescence occurs on the addition of an acid to the urine.

III.—Observe the specific gravity.

a. If the specific gravity is above 1025, test for glucose by (1.) potash solution and heat; GLUCOSE gives a dark solution. (2.) Add potash and filter, if necessary, then add copper tartrate and more potash until a blue solution is obtained; on heating to the boiling point glucose reduces a red or orange precipitate of $\text{Cu}^{\circ}\text{O}$.

b.—If the specific gravity is high and sugar is not present, add to a portion of the clear urine in a deep watch-glass about one half its volume of cold concentrated nitric acid; a deposit of hexagonal plates of urea nitrate indicates excess of UREA. (Probably excess of phosphates and other salts will be found accompanying excess of urea.)

c. If the specific gravity is below 1012, this may be due to great dilution of the secretion with WATER, which will be further indicated by a large quantity passed in twenty-four hours; but it is more generally due to disease of the secreting organs, and is accompanied by albumen, the urine being then frequently alkaline, but sometimes acid.

IV.—Heat a portion to the boiling point in a test tube, albumen may be at once coagulated; add nitric acid drop by drop; a flocculent precipitate indicates ALBUMEN; confirm by adding to another portion of the urine acetic acid, filtering to remove mucus, if necessary, and then adding potassium ferrocyanide; a white precipitate indicates ALBUMEN. The deposit from an albuminous urine should be examined microscopically for CASTS, PUS and BLOOD GLOBULES.

Boiling alone may first cause a precipitate of CALCIUM PHOSPHATE, which will be re-dissolved on the addition of nitric acid. If a turbid urine is rendered clear by boiling the turbidity is due to urates.

V.—Add to a portion of the urine ammonia in excess; the white precipitate consists of ALKALINE-EARTHY PHOSPHATES; filter and add ammonium chloride and magnesium sulphate; the white crystalline precipitate indicates the amount of phosphate which was originally present as ALKALINE PHOSPHATES.

VI.—To another portion add ammonia and filter; then add ammonium oxalate; the white precipitate contains the CALCIUM as oxalate.

VII.—To another portion add nitric acid; divide into two parts; to the first add barium chloride; the precipitate contains SULPHURIC ACID as barium sulphate. To the second add silver nitrate; the curdy precipitate contains the CHLORINE as silver chloride.

VIII.—A dark brown or blue colour may be due to INDICAN, which is destroyed by nitric acid.

Any colour from that of Gregory's powder to an olive green tint may be due in part to bile.

(1.) Pour a layer of the urine (concentrated if necessary,) on to a white dish, and add concentrated

nitric acid. A play of colours, green, blue, purple, and red, indicates BILE PIGMENT.

(2.) Boil a portion of the urine with acetic acid, and filter to remove albumen, then add a few crystals of cane sugar, and a few drops of concentrated acid; a purple tint indicates the ACIDS OF BILE.

A red colour may be due to blood; in this case heat will have destroyed the colour, and coagulated the albumen of BLOOD. Examine.

(1.) by the microscope for BLOOD GLOBULES, and

(2.) by the spectroscope for HÆMATINE.

A high colour may also be due to purpurine. In this case it is unaltered by heat and by nitric acid. Boil a portion with hydrochloric acid. A dark red or purple colour indicates excess of PURPURINE, of which a small quantity is present in normal urine. Allow to stand for a day; the crystals which slowly form are URIC ACID an excess of which frequently accompanies purpurine. — *Liverpool Medical and Surgical Reports.*

POISONED BY MERCURY FROM A TOOTH FILLING.

The following, from a Nebraska paper, shows that the "amalgam question" received some attention in the West: "Last Wednesday evening the intelligence was noised about that Mr. John C. Smith, a middle-aged man, unmarried, who lived in a small house next west of the residence of S. W. Allen, was dead. It was known in town that he had been suffering for some days with a swelled face and neck, coming from a tooth, which Dr. Keef, of Marysville, had lately filled, but his death was not thought possible. Dr. Sprague attended the deceased at first, but afterwards called Drs. Davis and Buffon: all of whom agreed that he was suffering from the effects of mercury, present in the amalgam used in filling one of his teeth. The filling had salivated the unfortunate man, and as the inside of his mouth, throat and windpipe swelled, respiration was hindered, and it finally ceased altogether.

"Poultices were applied, and other means used to reduce the swelling, but all to no purpose. Mr. Smith died about 7 o'clock Wednesday evening.

"By request of a number of the citizens, Coroner Buchanan next day ordered a *post mortem* examination to be made of the remains and an inquest to be held. Dr. Davis made the examination, opening the chest and taking out the lungs, and also extracting the filled tooth. No signs of any other disease were found except that caused by the mercury, and it was made clear to the jury by the Doctor that this caused the death.—*Dental Magazine.*

TREATMENT OF RINGWORM.

Dr. Tilbury Fox, in the course of some observations on the mode of preventing the extension of ringworm in schools, remarks that isolation at all hazards is the first thing to do. When a number of cases occur, it is better to separate instances of very bad and extensive disease again from slight new cases and convalescents, for the simple reason that active treatment may at once annihilate the disease

in the former, and in new cases and convalescents fresh implantations over the, in the main, healthy area of the scalp may be taken place from contact with bad cases of tinea. Dr. Fox would, of course, only adopt this plan where the cases of disease are very numerous—say thirty, forty, and fifty or more.

There are, next, certain general considerations to be taken account of. Attention to the dietary is one; for the under-fed, and ill nourished, and ill kept furnish the most appropriate nidus for ringworm. All deficiency in meat should be rectified, and in case the attacked or the non-infected look sickly or pallid, the allowance of meat and fresh vegetables should be increased, and supplemented by iron and cod-liver oil. So again, the cubic space allotted to each child should be ample, ventilation free, and cleanliness enforced with exceptional strictness. One word more as regards the general health of children. If with a vigorous system of inspection in constant operation many cases rapidly appear, and, in spite of hygienic measures, spread, the children furnish clearly a very suitable soil, and the dietary of the establishment should be looked to. If ringworm becomes epidemic, with a *bad system of inspection*, it implies simply neglect, of course. Here isolation is the main thing needed to protect the healthy, and not feeding up.

In all cases in schools the hair should be cut short, close to the scalp. Recent cases are at once checked and often cured by simple blistering. The disease, not having reached the bottom of the hair follicles, is at once accessible to remedies. The use of strong acetic acid is perhaps as good as the blistering fluid. If the case is not very recent, epilation of diseased hairs, after the Paris fashion, should be practiced. It is generally "too much trouble to do this." Dr. Tilbury Fox next enforces the use, every few days, of Coster's spaste to the extent of some five or six applications, and the subsequent use, night and morning, of some parasiticide ointment, diluted citrine ointment, or sulphur, creasote, and ammonio-chloride of mercury. The head should be washed each day and well greased. The latter prevents the escape and dissemination of fungus germs. If preferred, the head may be kept soaked in diluted sulphurous acid: of course a proper cap of silk should be worn.

It is scarcely necessary to do more than refer to the necessity of thoroughly cleansing the brushes, combs and towels of the diseased, and seeing that these are not used in common by the healthy and the infected. Towels should be well boiled. To one novel point Dr. Fox directs special attention: it is the disinfection of the air of the wards in which a large number of cases of ringworm have been. His recent observations show that the fungus germs are floating in the air; and though Dr. Fox had until lately no experience to go upon, because the observation is as yet a novel one, yet he has no hesitation in saying that the air of the wards should be disinfected by burning sulphur, if, after complete isolation has been practised where many cases of ringworm have occurred, other instances of disease still continue to appear amongst the previously healthy. (*Lancet*, Jan. 6, 1872.)

A REMEDY FOR HÆMOPTYSIS.

Dr. Holden says, in the *Medical Record*, that he desires to call the attention of the profession to a method of treatment of hæmoptysis, which, while most simple and efficacious, he has not seen described by any, viz., the throwing of the atomized vapour of a saturate solution of gallic acid directly into the mouth and throat. He has repeatedly found the most gratifying success follow at once, even in cases of profuse hæmorrhage. Unlike other styptics thus administered, it quiets the spasmodic cough, which seems the direct result of the presence of the blood, requires but a moment to prepare, and, aside from its efficacy, it inspires immediately the confidence of the patient. For about two years he adopted this method, and has been surprised that no similar experience has found its way into the medical journals. His habit has been to have an atomizer and bottle of gallic acid always at hand, and when summoned hastily, to mix the acid in a tumbler of cold water, and use even without waiting for the excess of acid to subside. It has proved successful in several cases where the blood was streaming from the mouth with every expiration. (*Med. and Surg. Reporter*, No. 768.)

CARBOLIC ACID INHALATIONS IN CHRONIC BRONCHITIS.

BY JOHN A. LIDELL, M.D., NEW YORK.

In a bad case of chronic bronchitis—a case in which there was strongly marked bronchiectasis on both sides, harassing cough both by day and night, profuse muco-purulent secretion that oftentimes was very offensive in smell, and emaciation with other general signs of bronchial phthisis, the writer has recently administered carbolic acid by inhalation, and made the patient comfortable by so doing, when every other palliative had failed.

At first it was given in the vapor of hot or warm water; but, after a short trial, these inhalations were discontinued, because they made the patient perspire too much. Then it was administered in the form of spray with Codman & Shurtleff's atomizing apparatus No. 5, and the result was gratifying in every respect. The preparation which was used most, consisted of the crystallized acid dissolved in water in the ratio of one grain of the former to one ounce of the latter, that is, 1 part of the acid to 480 parts of water. Trials were also made with a solution as weak as 1 part to 600 on the one hand, and as strong as one part to 300 on the other, but those having a strength of 1 part to 450 or 480 answered best. The patient was made to breathe or inhale the spray with deep inspirations, from five to ten minutes at a sitting, unless a feeling of drowsiness were sooner produced, once a day, usually; twice a day, however, when the expectoration was very profuse or offensive in smell.

The use of these inhalations was continued on and off for about eighteen months without producing any unpleasant consequences whatever. On the contrary

they always gave the patient marked relief. They invariably soothed and quieted the cough. They corrected the fetor of the breath and of the expectoration. They lessened the quantity of the expectoration itself in a decided manner without tightening the cough or rendering it dry. And they proved beneficial in other respects, for under their use the pulse became less frequent and irritable, and the tendency to afternoon fever was likewise diminished. Notwithstanding, this case terminated fatally (although the end was long postponed,) and therefore carbolic acid inhalations must not be considered as, in any sort of way, a specific for chronic bronchitis. However, our patient's life was obviously prolonged, and her comfort was greatly promoted by their frequent use. It is, then, as a palliative of more than ordinary value in the treatment of this disease that we now confidently recommend the inhalation of carbolic acid.

The only contra-indication to its employment in chronic bronchitis which we observed, was the contraction of a "fresh cold," especially when attended with fine crepitation. Under such circumstances we always judged it expedient to suspend the inhalations until the acute symptoms had passed away. Carbolic acid appears to be too irritating in its nature to be used in this way with safety in cases where there is acute inflammation of the pulmonary tissue or of the bronchial mucous membrane. But, in cases where those chronic inflammatory conditions of the bronchial mucous membrane, which need a stimulating plan of treatment, are present, this agent may be administered in the way mentioned above, without risk, and with great benefit to the patient.—*New York Medical Record*.

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MONTREAL, NOVEMBER, 1872.

MONTREAL AS A CENTRE FOR MEDICAL EDUCATION.

Montreal, the metropolis and great manufacturing centre of the Dominion, has always been recognised as the chief seat of Medical Education for the British American Provinces. Its rapid growth and increased manufacturing interests have largely developed those means, which in the first instance gave to our city its medical reputation. To-day, therefore, it should be in the position of extending to all who come to it the fullest possible advantages

which are to be derived from the material which is so abundantly supplied. Other cities, pre-eminently Toronto, are putting forward their claims, and unless Montreal chooses to be guided by plain common sense, we hesitate not to assert that the numbers who yearly come hither for the purposes of Medical instruction will before long be very sensibly diminished. In making this statement, we do so advisedly, for within the last few years, but especially this fall, there has been very loud murmuring, and much disapproval expressed at the facilities afforded at the Montreal General Hospital for the purpose of Clinical instruction. Those who have thus expressed themselves have for several years seen this grievance gradually growing worse, till this winter it has become so conspicuous and so aggravating that in the interest of the students and in the interest of the city, as a place of Medical education, we feel called upon to take notice of it. We know that a portion of the profession of the city will probably misconstrue our motives and assert that we desire to find places on the staff of the Hospital for some members of the Faculty of the Medical School with which we are connected. We repudiate at once any such intention, and assert that the views we now enunciate have been held by us, and freely expressed upon every fitting occasion, during the past eight years. We feel, and our opinion has been arrived at after seeing the working of both methods, and a mature consideration of the subject, that it is contrary to the spirit of the age that Universities should in the smallest degree exercise control over clinical teaching. Having said so much by way of introduction let us proceed to the more practical part of our subject. The Montreal General Hospital—a noble institution—has supplied the clinical material, or the greater portion of it, which has educated a host of Medical men who are now scattered throughout the length and breadth of the Dominion. Twelve years ago, when we attended it for the last time as a student, the number of indoor patients was very considerably less than they are now, while as regards students we are not beyond the mark when we state that then there was fully forty to fifty less than this winter. Even at that time among those who were anxious to benefit themselves to the fullest possible extent, there was a feeling, often expressed, that from the over-crowding of the wards with students, much of the instruction which should have been obtainable was lost. Year after year this state of things has gradually been getting worse, till now it is a common thing to hear it expressed by some of the more diligent students, that the time they are

compelled to pass at the Hospital is, for the reason we have given, so much time wasted. The cause of this is so plain that some of the Committee of Management of the Hospital have had their attention drawn to the matter, and have suggested the proper remedy—an increase in the staff of attending Physicians. At the present moment the Hospital staff is composed of eight active or working members, and two of them attend for three months. The manner in which this duty is, and always has been performed is deserving of every praise; but as only two attend at one time, there are at present fully fifty students or more following each physician. This fact carries with it a force of argument that no additional words of ours can possibly strengthen, and proves the necessity which exists for an increase in the staff of Physicians. We hold the opinion, and it is shared by the majority of students themselves, that if fifty of them follow one physician around the wards of an Hospital they will derive but a *modicum* of the benefit which should be obtainable from even the ordinary material to be found in Hospitals. The matter is an important one in the interest of our city continuing to maintain its ascendancy in the matter of Medical education, and the truth of our remarks can be verified at any time by those who will take the trouble to visit the Institution.

PERSONAL.

On the 12th November, among other operations in the St. Patrick's Department of the Hotel Dieu Hospital, Dr. Hingston had a case of lithotomy, in a child of one year, wherein the stone was supposed to date from birth. The stone was hard, and was about the size of the shell of a pea-nut. It was extracted by means of a thin scoop of horn, so that there was no undue dilatation of the wound, a point of some importance.

Dr. Hingston recently removed the greater part of the lower jaw, and the whole of the tongue at its roots. The patient, a man of fifty, made a rapid recovery.

Dr. Powell, of Victoria, British Columbia, has been appointed Superintendent of Indian affairs in that Province. We congratulate our class-mate upon this recognition of his abilities.

Dr. J. H. Wright, son of Dr. H. H. Wright, of Toronto, has received the appointment of House Surgeon to the Victoria Park Hospital, London, England.

Reviews.

THE PHYSICIAN'S VISITING LIST FOR 1873. Twenty second year of its Publication: Philadelphia, Lindsay & Blackiston: Montreal, Dawson, Brothers.

The kindness of the publishers has placed in our hands, this invaluable little work. We call it invaluable, and advisably so, for to many within our knowledge, it has repaid its cost a hundred times over, not to say anything of its great convenience, as a daily remembrancer of work. Those who have made use of it need no urging from us to induce them to again obtain it, but we advise those who have not seen it to order it without delay. It is compact, carried without the slightest inconvenience, and is arranged for from 25 to 100 patients weekly.

OVARIAN TUMORS; THEIR PATHOLOGY, DIAGNOSIS AND TREATMENT, ESPECIALLY OF OVARIOTOMY. By E. Randolph Peaslee, M.D., LL.D., Professor of Gynæcology in the Medical Department of Dartmouth College; attending Surgeon of the New York State Woman's Hospital; consulting Physician to the Stranger's Hospital: corresponding Fellow of the Obstetrical Society of Berlin, and of the Gynæcological Society of Boston; Honorary member of the Louisville Obstetrical Society; President of the New York Academy of Medicine, &c., &c., &c., with fifty-six illustrations on wood. New York, D. Appleton & Co., 551 Broadway, N. Y. Montreal, Dawson Bros.

This admirable treatise is divided into two parts, the first part treating of the normal anatomy, pathology and treatment of ovarian tumors, excepting ovariectomy, and beautifully illustrated with a number of original and well-executed drawings. The classification of ovarian tumors under two general heads, the solid and the cystic, presents the subject in a most simple and satisfactory form, and the subsequent grouping of these tumors is clear and scientific. In his differential diagnosis of abdominal tumors, Dr. Peaslee has handled his subject with masterly skill, and shown his thorough acquaintance with the literature of the day.

The second part of the work, which treats of ovariectomy, its history, statistics, indications, prognosis, operative methods and treatment is dealt with in the same original and able way that characterizes the first part of the work. The history of the operation is fairly and fully entered into, and the high honor of being the first ovariectomist is justly

accorded to Dr. McDowell, of Kentucky. With regard to the history of ovariectomy, while considerable diligence has been exercised in the collection of cases it is much to be regretted that more complete returns were not obtained. The names of several well-known operators have been omitted, among which is Dr. Burnhams, of Lowell, Mass. The returns of cases performed in Canada might very appropriately have found a place in this connection. The author's observations with regard to the selection of cases, and the proper time for their operation, commend themselves as reasonable and proper, and also accord with the opinion of such men as Dr. Keith, and Mr. Wills, whom, we think we may justly regard as the highest authorities on all matters connected with this operation. The prevalent opinion held a few years, against tapping as tending to diminish the chances of recoveries, is refuted by the latest statistics. Drs Keith and Wells both prefer to defer the operation as long as the patient's health will permit; resort to tapping in the meantime for the relief of urgent symptoms.

The importance of having the operation of ovariectomy performed in private houses or private hospitals, is forcibly dwelt upon, and commends itself to the judgment, as desirable in the treatment of all diseases. Sir J. Y. Simpson's late paper on "Hospitalism" conclusively shews that a smaller percentage of deaths occur in small Hospitals, than large ones. The mode of performing the operation and the after treatment recommended, are based upon sound physiological principles, and are such as have been followed by the greatest success. The preparatory treatment and arrangements for the operation are in accordance with latest established facts. The author devotes special attention to the subject of securing the pedicle, and arrives at the conclusion, that the ligature is more safe than the clamp. This conclusion although sustained by statistics does not accord with the practice of either Keith or Wells, as the former operator is now inclined to give preference to the actual cautery, and the latter adheres to his clamp. The treatment recommended after ovariectomy, especially in cases of unusual complications, is most thorough and well worthy of the attention of every operator. The last chapter of the work is devoted to the hygienic treatment of those who survive ovariectomy—attractive; while Dr. Peaslee's style is clear, and mode of treating his subject is eminently practical and complete. The work is gotten up in D. Appleton & Company's best style, and should be in the hands of every one who attempts to deal with ovarian tumors.

Reports of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

MEETING HELD NOVEMBER 2ND., 1872.

Dr. REDDY, Vice-President, occupied the chair. The attendance of members was small.

Dr. E. K. PATON was elected a member of the Society.

Dr. F. W. CAMPBELL gave notice for the introduction of a bye-law to create corresponding members of the Society.

Dr. GEORGE W. ROSS read a paper on Thoracic Aneurysm. The patient had always enjoyed good health, till the spring of 1872. At one time, he had been intemperate. Never had had syphilis. Presented himself to Dr. Ross, on the 12th of last July, complaining of pain, which he said had begun to attract notice about three months previously. It was described as being at times burning in character, while at others it was lancinating, getting much worse towards night, at times becoming agonizing, and preventing sleep. Resonance of the chest wall was clear throughout. Heart's sounds quite natural. No murmur to be heard either in front or behind. Striking the vertebræ gave no pain, and a diagnosis of intercostal neuralgia was made. A liniment of soap, opium and chloroform as well as fly blisters were used, and in about six weeks the patient had improved so completely, that he proposed to resume his work of a farm laborer. On the 3rd of September, the pain having returned, he was admitted into the Montreal General Hospital, and on the 15th of October, suddenly expired. A *post mortem* revealed an aneurism of the thoracic aorta, with a firm clot in the sac of the size of a goose egg, and erosion of three of the dorsal vertebræ.

After a brief discussion, and the thanks of the Society had been tendered to Dr. Ross, the meeting adjourned.

MEETING HELD NOVEMBER 16TH.

Dr. R. PALMER HOWARD, President, in the chair.

Drs. WILLIAM BURLAND and DUHAMEL were elected members of the Society.

Dr. TRENHOLME read a paper upon a case of abdominal tumor, (it will be found among our original communications.)

Dr. REDDY stated that he had seen the case, which Dr. Trenholme had apparently forgotten. He examined per vaginum, and studied the case closely,

but although he excluded ovarian disease, it was impossible for him to arrive at any definite opinion.

Dr. F. W. CAMPBELL said he saw the case several times in consultation with Dr. Trenholme. It was to him an exceedingly puzzling one. Although no positive diagnosis could be arrived at, it was clear to his mind that the proper treatment was to evacuate the contents of the cyst; that this was correct the subsequent history of the case proved. But why the cure did not follow the first tapping, as it did upon the second, was to him a little of a mystery.

Dr. REDDY said that tumors of the kidney were not quite so rare, as mentioned by Dr. Trenholme. Before coming to the meeting, he had looked up the subject, and found mention of several. One case was met by Grailey Hewett, another was the case of a little boy who had the disease for five years, and from whom a large quantity of fluid was taken. Spencer Wills operated upon a case, as did also another celebrity; altogether he had got records of six cases.

Dr. CRAIK wished to know if there was any evidence in the abdominal cavity of inflammatory action, showing that inflammation took place after the tapping. His object in asking was to ascertain if so irritating a fluid as the urine could be extravasated into the abdominal cavity without producing serious inflammation.

Dr. TRENHOLME, in answer to Dr. CRAIK, said there were no adhesions between the walls of the cyst and the abdomen. There could be no doubt but that some of the contents of the cyst were extravasated, as she complained of a burning sensation, radiating from the point of entrance of the trocar, over the whole abdomen. The amount of shock that followed was very great. In reply to Dr. F. W. CAMPBELL's remark as to why the first tapping did not effect the cure, which followed the second tapping, he stated that it was in all probability due to the fact that at the time the cyst was first evacuated, the secreting structure of the kidney had not been injured to an extent sufficient to prevent the rapid secretion of urine. That before the second operation had been performed, the organ performed its function so slowly as to allow the fluid to escape without pressing upon the valvular orifice of the ureter, which thus remained patent for the rest of her life.

Dr. HINGSTON mentioned as an example of the extreme difficulty in the diagnosis between ovarian disease and tumor of the kidney, a case which occurred in his practice some five years previously. The patient had been seen by a number of the Surgeons

of Montreal, not one of whom diagnosed tumor of the kidney. He began, as he thought, ovariectomy, but cut down on what proved to be a tumor of the kidney of enormous size. The patient died. Since then he had met with one or two cases, and remembering some of the prominent symptoms present in the fatal case, he was enabled to diagnose tumor of the kidney; still he admitted that the signs whereby to diagnose it were not very clear.

Dr. E. K. PATTON mentioned the case of a female child, twelve months old, under the care of Dr. Jackson of Quebec, who died from an abdominal tumor. From the age of the child, it was not suspected to have been ovarian, which the *post mortem* revealed it to be.

Dr. HOWARD inquired if it was malignant.

Dr. PATTON replied that he could not state, as the specimen was not examined microscopically.

Dr. HOWARD, (President,) stated that as regards the situation of the tumor in Dr. Trenholme's case, it was the usual site of renal tumors. The cause of the enlargement of the pelvis of the kidney was to him a good deal of a puzzle; it was in fact an anatomical puzzle. The most common cause was a renal calculus. An examination of the ureter proved that it was not thickened, so that any idea of tubercular disease had to be abandoned. The obvious cause was not ascertainable, but whether the *post mortem* had been sufficiently exhaustive to say that none existed, was for Drs. Trenholme and Kennedy to say. He then referred to the fact that the disease although not common was not exceedingly rare, specimens of renal tumors being found in all museums. He stated that some five years ago he had a case under his observation, whom in early life he had attended for renal calculus. He had lost sight of him for several years; when he returned there was a considerable tumor present. The early history enabled him to diagnose a tumor of the kidney. The cyst was enormous, and had produced abdominal dropsy from pressure on the veins. It was tapped, but the patient died.

Dr. TRENHOLME, in reply to Dr. Howard, stated there were no calculi, and that the ureter was pervious and healthy, and that in the diagrams given by Dr. Bight the tumors were generally somewhat lower in the abdomen than in this case, and did not press against the diaphragm without being at the same time extended low in the lumbar region.

Dr. CRAIK accounted for the origin of the tumor upon the theory that thickening of the mucus lining of the ureter prevented the escape of the urine, and that in this case the peculiar way in which the sack

was formed rendered further escape of fluid, while the pressure continued, impossible.

Dr. FENWICK thought that if due to pressure of abdominal organs, the ureter as well as the pelvis of the kidney would have been dilated.

The President conveyed the thanks of the Society to Dr. Trenholme, for his paper, which he considered one of the most interesting which had been brought before the Society for some time.

Dr. BELL then read a paper on imperforate hymen, which will be found among our original communications.

Dr. TRENHOLME said it would have been interesting had Dr. Bell extended his inquiries, and ascertained if the husband had been having sexual intercourse through the urethra.

Dr. HINGSTON said that was probable, as Dr. Bell had said the urethra was dilated to an extent capable of admitting his little finger.

Dr. FENWICK stated that he had had a case under his care, where there was obliteration of the vagina from childbirth, and that the urethra was sufficiently large to admit the index finger. The husband had been having connection for months through the urethra, and did not know it. She came under his (Dr. Fenwick's) care, suffering from incontinence of urine, due to this fact.

The Society voted its thanks to Dr. Bell for his interesting paper.

A good deal of business of purely local interest was then transacted, and the Society adjourned.

BIRTHS.

On the 20th November, at 686 Dorchester street, Montreal, the wife of Dr. Geo. Baynes, of a son.

MARRIAGES.

At the Parish Church of Rosneath, on the 22d. October, by the Rev. R. H. Story, minister of the parish, assisted by the Rev. William Scott Moncreiff, of St. Thomas' Church, Edinburgh, David Scott Moncreiff, writer to the Signet, Edinburgh, to Margaret Fisher, eldest daughter of George William Campbell, Esq., M.D., Professor of Surgery McGill College, Montreal, Canada.

At George Square, Edinburgh, on the 29th Oct., by the Rev. Charles J. Brown, D.D., Moderator of the Free Church General Assembly, Alexander Russell Simpson, M.D., Professor of Midwifery, &c., in the University of Edinburgh, to Margaret Stewart, daughter of George F. Barbour, Esq., of Bonskeid, Perthshire.

DIED.

On November 25th, Maria, widow of the late William Wood Squire, M.D., and daughter of the late Joseph Newman Hall.

In this city, on the 26th instant, Emelia Margaret, twin daughter of Francis Rourk, M.D., aged 14 months.

Original Communications.

Two years and a half in a London General Hospital. By G. F. SLACK, member of the Royal College of Surgeons, London, late House Surgeon Charing Cross Hospital.

A few months back there appeared in the columns of your journal some very interesting letters about London and London hospitals, from the experience of Dr. Perrigo, who had ample opportunities of observing the general management and different modes of practice in those institutions. I think, however, that following on the above a more minute account of the class of cases admitted into a London General Hospital, with a general idea of the treatment pursued, would be of interest to those of your readers who have not visited the old country. The Hospital to which I was attached is situated in the very centre of London, and affords ample accommodation for 160 patients. Eighty of the beds were set aside for surgical cases; seventy for medical; ten were at the disposal of the Physician accoucheur. Of the surgical beds, twenty were occupied by children between the ages of two and ten, suffering chiefly from so-called scrofulous disease of joints, hips, knee, ankle, shoulder and elbow, in their order of frequency. Cases of spinal disease, where treatment in an hospital would be considered beneficial, burns, scalds, fractures, etc., and occasional cases of stone in the bladder, although the latter cases are usually picked up by hospitals specially intended for that purpose, or are taken to surgeons specially skilled in Lithotomy, viz., Sir Henry Thompson, Sir William Ferguson, and others. The children, as a rule, belonged to London, and were of the half-starved, badly clothed order, although occasionally cases were sent up from the country for operation.

The different methods of treating hip-joint disease in its earlier stages were as follows:

1. To let the child lie in bed without any appliance.
2. To apply an interrupted liston with a perineal bandage.
3. A small sand bag attached to the foot with a perineal bandage passing under the opposite, that is the sound hip, and fastened to the head of the bed. Some surgeons prefer the perineal bandage to be applied on the diseased side.

The following was the ordinary way of applying a sand bag: A strip of plaster about 2 inches wide was stuck along the inner side of the leg, commencing below the knee and passing round the sole of the foot forming a loop, and then up the outer side of the

leg, a bandage being then applied to keep it fast. A sand bag, weighing from five to ten pounds, was fastened to the loop by a cord which passed over a roller fastened to the foot of the bed. By this means extension is applied directly in the axis of the limbs. Too much care cannot be taken in applying any instrument to the human body, but especially in the case of children, who are quite restless enough naturally, and do not take kindly to splints, so that every care should be taken to have the splint properly padded, to prevent bandages from chafing, or joints being kept on the strain as the ankle joint often is, through the foot being pointed downward too much.

4. To fix the hip-joint by the application of a plaster of Paris bandage to the limb and pelvis.

5. The splint devised by Dr. Sayre, of New York, was occasionally used, though not with as much success as he claims for it, although it answers very well as long as the patient is confined to bed—effectually relieving pain. It is not reasonable, however, to suppose that any instrument can be devised that will allow the patient's walking about, and at the same time preventing the head of the femur from touching its socket, if even only very slightly, still, when the joint is inflamed, causing intense pain.

6. Of the many methods of treating disease of the hip-joint in its earlier stages, or even after operation, I think Mr. Barwell's plan is by far the best.

It is as follows:—A wooden splint, like an ordinary long liston, with this exception, that it has a hinge joint opposite the hip, allowing the splint to be opened outwards, is bandaged to the limb as high up as the knee, a loop of strapping having been first fastened to the leg, as described above. From this loop a cord passes round a pulley, which is fastened to the lower end of the splint, up the outside of the splint over a pulley on the upper end of the splint, and then is fastened to a perineal bandage. This cord can be gradually tightened. Then a waist bandage is applied.

The great advantage this method has over others is that, in addition to steady extension, the limb can be abducted to any extent, which is one of the best means of preventing the tendency to great shortening after excision of hip. This fact is well enough known to any one who has had the care of many cases of fractured femur.

I have had opportunities of watching this plan of treatment, both in the hospital as well as in private cases of Mr. Barwell's. Whether he was fortunate in his cases or not, it is very difficult to say, at any rate I saw the disease arrested in two cases, one after wearing the splint constantly for three months. The

other child was able to walk without assistance at the end of the second month. A case in which Mr. Barwell excised the hip-joint recovered very rapidly, much more rapidly than any case that has come under my observation.

If the disease be not arrested, destruction of the joint follows, with extension of the disease to the bones forming it. Abscesses form, and may point in any direction. It was a fixed rule never, whether deep-seated or superficial, to open them with a knife. Usually they were allowed to burst and discharge themselves gradually; occasionally, when superficial a small amount was drawn off with a trocar and cannula, the opening was then closed, and at the end of a fortnight a little more was drawn, and so on, until the abscess was emptied. I have never seen one opened under carbolic acid, nor have I heard of any case treated in that way in London, although I believe in Scotland the practice is becoming very common, of treating all chronic abscesses by opening them under a solution of carbolic acid.

With regard to cases where the hip-joint was excised, the practice was to make a crucial incision, remove the diseased bone, and then plug the wound with lint, soaked in a solution of carbolic acid. Many London surgeons, however, prefer to clean the wound thoroughly, and to bring the edges accurately together with sutures, leaving a small opening at the most pendant part. I believe the latter to be far the better way. The limb was then either placed between sand bags, as is the custom of Mr. Gant, of the Royal Free Hospital, who has been very successful in cases of excision of joints.

2. An interrupted liston was applied, which is a very objectionable mode of treatment, as the patient is sure to become deformed, especially if long treated in this way.

3. A well padded wire cradle which fixes both legs and pelvis reaching as high as the arm pits. There is an opening at the side, and one underneath so that the wound can be dressed, the patient can be placed on a bed-pan, carried from one room to another, or even taken out in the open air without the slightest movement of the lower limbs or pelvis. Extension can be readily applied by using a perineal bandage, so that there will be very slight shortening and no deformity of the body, as in cases treated by an ordinary outside splint.

4. Mr. Barwell's splint, which has been described. By abducting the limbs, the amount of shortening will be very slight. To a certain extent want of success in this operation as compared with other major operations is due, in London hospitals at least, to the

fact that cases are not sent into hospital until the time most favorable for operation has gone by. I had the charge of a case on which Dr. Sayre, of New York, operated subperiosteally. On the third day, I think it was, the periosteum sloughed and came away. I saw two cases operated on according to his method, in another hospital. All three did very well, more from the fact that the soft parts were less disturbed, owing to the great care necessary in removing the periosteum, than from the fact that the periosteum was preserved, as in the first case mentioned I know it was not.

THE ABORTIVE TREATMENT OF SMALL-POX.

BY W. E. BESSEY, M.D., MONTREAL.

In view of the loathsome character of this disease, its excessively contagious nature, its mortality in persons unprotected by vaccination, the hideous deformity and disfigurement which is a frequent result of its attacks, on the one hand; and on the other, the many evidences of its entire dependence upon a *particular disease germ*, engendered, preserved and multiplied under certain favourable conditions; as shewn by the success with which it can be destroyed, prevented and controlled by attention to habits of cleanliness, ventilation; and especially its destructibility by disinfectants, there seems to be not a shadow of doubt, so far as experience can guide us, that this *entity*, be it emanation, germ, or fungus, is incapable of resisting the destructive action of certain chemical agents, when brought into direct contact with it. Considering the constitutional disturbance, fever, and eruption, which characterize this disease, evidences of the presence and operation of this poison in the human system, which must have been introduced in infinitesimal quantity by the lungs, or by the stomach, and which must therefore, have been multiplied an indefinite number of times in the system, according to the degree of susceptibility of the patient, or the suitability of the soil in which it was thus transplanted, by being taken into the system. Moreover, as it is evident that nature treats this as it does every other morbid poison, by at once making efforts to cast it off as an enemy, or alienate it, I determined to try what success would follow an attempt to destroy the poison in the blood, and prevent the continuation of its ravages in the system, by bringing in direct contact with it in the circulation, substances which, when used as disinfectants, had not only succeeded in destroying its contagiousness, but also in eradicating the disease itself.

I have proceeded upon the hypothesis, that if the

disease depends upon a distinct *germ* or *primal cause*; —which it is self-evident that it must—and that this *entity* or *disease germ*, is capable of multiplication or reproduction in the system to an indefinite extent; and that the symptoms of small-pox are the resulting constitutional disturbance from its presence and reproduction; and the eruption, the casting out or effort of nature to rid itself of this enemy; and that this eruption, and other emanations from the patient are contagious; then, the shortest route to a successful eradication of such a poisonous influence from a community, neighbourhood or family, must be to attack, neutralize, and destroy the *disease germ* itself in each individual patient, by the use of such agents as are likely to be successful in accomplishing the feat. In this way the ravages of the disease would be cut short in the subject of its attack; nature would be prevented from sinking exhausted from its effects; its power of contagion destroyed and its ravages confined to the limits of a few isolated cases, and by a wise use of disinfectants in suspected localities, the fountain source destroyed from whence new cases might spring up and so extend the ravages of this dire disease. To meet these indications, I selected carbolic acid as an disinfectant and antiseptic agent, capable of destroying the *disease germ*, whatever may be its nature, whether an exhalation, a fungoid, an atmospheric influence, or a *disease germ*, capable of being taken into the system by injection, absorption, or inhalation.

If atmospheric germs, when introduced into open wounds are capable of occasioning suppuration, setting up putrefaction and preventing the healing of wounds, as maintained by Dr. Lemaire, of Paris, and Mr. Lister, and carbolic acid is capable of destroying these germs and preventing suppuration, thus promoting the healing of wounds, as it has been amply proven to be capable of doing. If it has been successful as an antiseptic and disinfectant in multitudes of ways in destroying disease emanations, and in opposing the spread of this and other contagious diseases, scarlatina, measles, typhus and typhoid, cholera included, must it not be through the power which it possesses of destroying *disease germs* in whatever form, of whatever nature, and under whatever circumstances, brought into contact with them even in the sanguineous fluid itself as in Pyemia, in the human subject. Its suitability, therefore as an agent calculated to destroy the small-pox *virus* in the system cannot be questioned, and especially when used in solution with glycerine, an agent which possesses such power of penetrability as to find its way to the most minute cells of the bony structures themselves. I therefore

selected carbolate of glycerine as the remedy best calculated to perform the work required of any remedy administered with such an object in view. The more perfectly to attain to the required *desideratum*, namely, a thorough antiseptic and disinfectant remedy, I combined the sulphite of soda in the prescription, as being a remedy well calculated, by virtue of the sulphurous acid which it contains, to destroy any parasitic or vegetable fungus which might at any time be present, or have any part or lot in producing or shaping the course of an attack of the disease, and which are assumed to exist in various forms of putrid fevers, and other forms of germinal disease. Moreover, sulphite of soda is a remedy of acknowledged value in many forms of disease depending upon a blood poison. The sulphurous acid, which is evolved when the salt comes in contact with the acids of the stomach, I suppose to act as an antiseptic and disinfectant, while the soda forming other combinations may act as a simple alkali or an aperient. For internal administration, then, I devised the following mixture:—

R Acid Carbolic, ʒ j. Glycerine ʒ j. Sodæ Sulphitis ʒ x. Aquæ ad. ʒ vj. Of this a dose proportionate to age of patient. For infants, $\frac{1}{2}$ a teaspoonful; for children up to about 7, one teaspoonful; and for adults, a desertspoonful (or four teaspoonfuls) every third hour, to be administered as early as possible in the disease.

When there was much fever, and little action of the skin and kidneys, I gave the following as a diaphoretic every hour, until the feverish, or congestive stage of the disease had passed over,

R Potass Chloras ʒ ij. Liqueur Ammon Acet. ʒ ij, Spts. Eth. Nit. ʒ ij, Aquæ ad. ʒ vj. A teaspoonful for a child every hour, four times as much for an adult.

In cases where the eruption had already appeared before beginning the treatment, a topical application was required, which would at once destroy the contagious emanation from the vesicle or pustules, and at the same time remove the distressing itching present in most cases. To meet this indication, I prescribed a carbolate of glycerine, as follows:

R Acid Carbolic ʒ ij, Glycerine ʒ ij. To be applied to the face and other portions of the body on which the eruption had already appeared, once or twice a day with a feather.

I was not long waiting for an opportunity for putting this plan into practice. Mr. A., residing in Wolfe street, called upon me to visit his wife upon a Saturday evening in April last. I found her suffering from symptoms premonitory of small-pox, high

fever, great thirst, pains in limbs and back, tongue furred, &c., &c.

Prescribed Pulv. Doverii, grs. x. every six hours, with drinks of hot gruel *ad libitum*. Saw her again on Monday. The characteristic eruption of small-pox had now made its appearance copiously over the neck and face, arms and chest, and upon the inside of thighs—high fever and great thirst. Patient was nursing a child eight months old, and was the mother of a family of five other small children. I recommended immediate isolation of children, or removal of mother to Hospital. Neither recommendation would be acceded to. I then prescribed the acid carbolici and sulphite of soda mixture, a desertspoonful dose every three hours, and gave the diaphoretic mixt. at intervals of every two hours, with simple gruel or milk diet. A gentle laxative being required by the costive habit of body, I ordered a seidlitz powder once or twice a day, as might be necessary to preserve a lax condition of the bowels. No external application was made use of in this case. On the second day the fever had abated, the pustules had begun to decline, and by the sixth day after the appearance of the eruption it had entirely disappeared, and the patient felt well enough to sit up, but was not permitted, for prudential reasons. The child continued to nurse throughout without manifesting the slightest illness after the first two or three days. None of the family contracted the disease. The patient exhibited no trace or mark of the disease after recovery. This gentleman afterwards informed me that he gave several bottles of the prescription to French Canadians in the neighborhood, members of whose families were suffering from the disease, in all of whom its action was alike satisfactory. Indeed, I had sufficient proof of this in the number of persons of that nationality who afterwards applied to me for "that particular prescription."

Case No. 2.—Mrs. R's child, Murray street. This child was aged 2 years. When seen the eruption was in full bloom, but distinct and copious. The child had been tried three several times with vaccination during its infancy, but each time without success. The face and head were considerably swollen, the skin very red, the child restless, and manifesting considerable internal distress by moans and cries, &c. The bowels had been costive. Ordered a moderate dose of castor oil. Pulse 140; pupils contracted, breathing regular, but frequent; kidneys acting as usual. Fearing congestion of brain I added to the febrifuge mixture, usually prescribed, Tr. Aconit. Rad. Gtt. s.s. doses, and to be given every hour until the fever abated. I ordered the carbolate of

glycerine (diluted) to be applied over the whole surface with a feather wherever the eruption existed, twice a day. The carbolate of soda mixture, or (carbolic acid and sulphite of soda,) I gave every three hours in doses of 1 gr carbol. acid to 10 grs. soda sulphis, and recommended milk diet only, with an occasional mild dose of castor oil if necessary. On the second day following, the pulse had fallen to 96, the pustules had begun to pit and wither, the feverish condition was entirely gone, and by the seventh day the pustular eruption had withered away to a dry scurf or scale, and was rapidly falling off, and without leaving a solitary trace of their late presence on the skin; the child was now sitting up in its cot, playing with its toys.

Case No. 3.—Child of Mr. S., commission merchant, æt 2 years, had been sick eight days. The feverish stage of incubation lasting four days, on 5th day the eruption appeared; had been out three days when seen. Eruption copious and confluent upon the face and chest; constitution not strong. Child evidences signs of debility, and depression, with possible sinking, to be feared. Pulse 100, feeble, but with a disproportionately high fever. Prescribed as a stimulating diaphoretic the following:—

R Potass Chloras 3j, Liquor Ammon Acet. ʒj, Spts. Eth. Nit 3iv, Aquæ ad. ʒiv. Sg. A teaspoonful to be given every hour. At same time ordered the acid carbolie, and sulphite of soda mixture, (1 gr. acid carbol. to 10 soda sulphite), to be given every three hours.

As a topical application to destroy infectious nature or emanations from skin (there being other children in house), and to allay itching, the carbolate of glycerine, was ordered (3 ij, acid carb. to glycerine ʒ iij,) to be applied with a feather to the whole surface of body at least once a day, oftener if it should appear necessary. To quote the father's own statement, "As soon as we began to use the remedy the fever abated, and the eruption began to wither and desiccate, and in about six or seven days had entirely disappeared." No one contracted the disease from this case.

Cases No. 4 and 5.—Mrs. M's. children, aged respectively 2 years and 9 months, of ordinary strength of constitution. Eruption had been out three days, fever slight, eruption not copious, ease of a mild character; had both been vaccinated. Gave no diaphoretic mixture, used only the carbolate of soda mixture internally every three hours, and the topical application of carbolate of glycerine, (diluted for youngest child), upon the skin. These children both did well, the eruption withered away, and rapidly disappeared.

Case No. 6.—Mrs. L. McD., a married woman, æt. about 30, nursing an infant 6 months old. The mother contracted the disease, and the eruption made its appearance on fourth day, of a copious character, not confluent. Fever high, great thirst, and pains in back, head and bones very distressing. Gave seidlitz powders as aperients, and prescribed above remedies in following doses: Acid carb. grs. ij, sodæ sulphitis grs. xv. with glycerine, every three hours. The diaphoretic mixture also, during first two days, or until fever abated, in liberal doses, and the usual topical application to the skin or eruption. In this case the effect of the treatment was most marked; the pustules immediately began to decline, not going on to fill or mature as is usual in small-pox; the fever subsided on the second day, the pains left simultaneously with the fever; the sleeplessness, which had been a distressing symptom before using the medicine, was succeeded by comfortable rest during the first night after taking medicine, and patient continued to rest well after. The eruption, which had begun to desiccate on second day of treatment, began to scale off on the fourth day, and soon entirely disappeared, leaving a surface free from any traces of its former presence.

Strange to say, the child continued nursing throughout, and did not contract the disease. This woman is mother of six young children, none of whom contracted the disease.

Mr. F.'s children, two boys, aged respectively 10 years and 4 years, residents of St. David's Lane. Was called to see oldest child, who was first taken ill; had been ill for some days. Found head and face very much swollen, throat much inflamed, tonsils enlarged, eruption copious and confluent, body completely covered, fever high, and attended with constant delirium, eyes swollen and shut, and deafness present; child had been vaccinated in infancy.

Prescribed external applications of strong carbolate of glycerine to surface of body, and the following diaphoretic mixture:

R Potass Chloras 3j, Liqr. Ammon Acet. ʒj, Tr. Aconit Rad. Gtt. xxxij, Spts. Eth it, ʒ Niv, Aquæ ad. ʒiv. A teaspoonful every four hours. Made use of a mouth wash for fauces and tonsils of Potass Chloras. Ordered carbolate of soda mixture every three hours.

This patient appeared to improve during the first week. The eruption declined during first four days, after which it refilled again, or rather an eruption succeeded it of what might be termed copious white blisters, filled with a thin milk serum or fluid. The delirium suddenly increased, the throat became

much worse, and the patient refused all fluids, even medicine.

By this time the tonsils were extensively ulcerated. I prepared a lotion of carbolic acid, 1 to 100 of equal parts of glycerine and water. This enabled the patient, after a few hours frequent application, to take some milk; beef tea was now ordered in spoonful doses every hour, with tart drinks. The patient continued insensible, and in a few hours afterwards showed signs of sinking, succeeded by a feeble pulse, coldness of surface, shiverings, and finally patient died on 14th day, in a state of collapse. My two important mistakes or omissions in this case seemed to me to have been omitting to immerse the whole body in a warm bath in the beginning of the case, or even later, which might have been daily repeated; and not using carbolic to the throat affection when first seen, and depending too much upon chlorate of potash. The throat difficulty seemed to be the pivot upon which the result of the case depended. Altogether the case was the most severe I had seen for years, and had been contracted from a straw bed, which had been thrown out of a neighboring house, upon which two patients, a mother and child, attended by a prominent medical gentleman, had died of the most severe and confluent type of the disease. The second boy came under my care during the fever stage, and I at once began the internal administration of the carbolic acid and sulphite of soda mixture, paying great attention to the skin and throat to which I applied a very weak carbolic acid lotion. The bowels were kept relieved by castor oil, and the eruption, which appeared on the fourth day, began to decline on the sixth day, and was entirely gone on the 8th. This child had been tried with vaccine, but unsuccessfully. Wherever administered, in early stage of the disease the pustules have been prevented from maturing, and in no instance has any one contracted the disease from those thus treated.

This treatment is essentially the same as that followed by Dr. Boyer, of Philadelphia, and published in the Medical and Surgical Reporter. He gives a solution of 2 grs. carbolic acid, with 15 to 20 grains sulphite of soda every three hours, but with *no other treatment* than an ordinary purge during the initiative or forming fever.

The result of Dr. Boyer's experience with this plan of treatment, which seems to have been large, he gives as follows:—"The result, after several months trial, with myself and son, has been, that, in *every case of variola* and confluent small-pox, on the fourth day of the eruption the swelling of the face abated, the pulse fell to a normal rate, the tongue commenced

clearing, and the eruption began to dry up, and the pustules withered and shrivelled. By the seventh and eighth day of the eruption, the patient was convalescent, without a sign or mark of having had small-pox after the slight desquamation of the light scales or scabs fell off. In no case by this treatment did the pustules positively mature, but always dried up before maturation. Externally any soothing application for the first three days is all that is required to allay itching, etc."

The above extract from Dr. Boyer's statement of his experience fully accords with my own observations, — which, however, have been necessarily somewhat limited—except in two particulars; first, that the eruption began in every case to wither on the second day after the remedy had been administered, and again, that no one, so far as I have been able to ascertain, contracted the disease from the patients under treatment. I am induced to report this plan of treatment with my views as to the philosophy of it, in the hope that others who may have opportunity may be induced to take it up and give it a more widespread and extended trial than it has yet received.

Case of Intermittent Fever, originating in Montreal, by Francis W. CAMPBELL, M.D., L.R.C.P., London, Professor of Physiology in the University of Bishop's College, Attending Physician, Montreal Dispensary.

Read before the Medico Chirurgical Society of Montreal, November 14.

Intermittent Fever, or Fever and Ague, is a disease which is not at all uncommon in Montreal; but when the history of the case has been thoroughly sifted, it will almost always, if not invariably, be found that the patient has resided either in a district which is known to produce ague, or at all events in a section of country which has the reputation of being marshy. During the sixteen years that I have been connected with the profession I have seen many such cases, but I have not till this summer met with a case occurring in this city, and where the evidence was conclusive as to its having originated here, as the patient was born in Montreal, and had never been absent from the city for even a single day. I was under the impression that, as a local disease, it was extremely rare, the only other case I remember having heard of, occurring in the practice of my preceptor—the late Dr. James Crawford,—the details of which have, however, escaped my memory. Upon my having expressed my intention one month ago to read this case to this Society, on

account of its being, as I believe, a rare case, more than one member stated that they had had several such. I hope they are prepared this evening to give us the facts concerning them, and add some little information as to what has produced the disease in Montreal. I will not make any attempt to describe the causes which have been said to give rise to the disease, although perhaps some little interest might be thrown around the subject, by entering upon a discussion of the views advanced within a few years by Dr. Salsbury, of Cleveland, Ohio. My object, however, is to detail a case—not write a paper upon Fever and Ague.

Case.—On the 4th of June of this year, I was requested to see Bernard McAllister, aged 15 years, residing in McCord Street, and, on visiting him, he informed me that on Sunday, the 2nd instant, he had bathed in the Lachine Canal. The water was not warm, and, according to his own statement, he remained in it so long that, from the amount of heat extracted from the body, he became so benumbed that it was with difficulty he reached the shore. On commencing to dress himself, which he was unable to complete without the assistance of some comrades, he noticed that his body was of a purplish blue color. On reaching home, he was seized with sickness at the stomach, and with an intense pain in his head. He was placed in bed, and warm bottles put to his feet. Copious emesis followed, and the head was slightly eased, but it still continued to throb and ache, and he was unable to get warm. When I saw him on the 4th of June, he was sitting up in bed, and complained of still being cold; his head was still bad, and there was now a severe pain—heavy and dull in character, extending over the back, but worse about a hand's breadth below the angle of the scapula. The skin had the appearance familiarly known as "*goose skin*." Eyes were heavy, tongue dirty—no appetite. Pulse 96—not at all full in volume. I directed a mustard foot bath, and gave him at once ten grains of Dover's Powder, leaving him a prescription for a mixture of Liq. Ammonia Acetates with Nitrate of Potash.

On the 5th, when I called, I could not say that there was any improvement, although he had passed a very comfortable night. Indeed, when I entered the room, although the day was comparatively a warm one—he looked as if he was in an ice house, skin was bluish, hands and feet were cold, and the nails congested. The pulse had fallen to 72. I ordered warm drinks, and bottles of hot water to sides and feet, and to continue the mixture.

6th June. On making my visit to-day, I was

informed that I had hardly left the house the previous day when the patient was seized with a severe rigor, which was followed by fever and sweating—the mother asserting that the two last occurred at the same time. The appearance of the patient was better to-day, although he still complained of not feeling warm; the skin was more natural, but the tongue continued dirty, and the pulse was much about what it was the previous day.

7th June. To-day, when I made my visit, I found the patient in high fever, which had then lasted fully two hours, and had followed a distinct rigor, as on the 5th. I now felt sure that I had a case of Intermittent Fever, but to make assurance doubly sure I returned to the house between five and six o'clock p.m., when I found the patient about recovering from profuse perspiration. I was no longer in doubt as to my diagnosis, and inquired very particularly if he had ever been absent from Montreal, when his mother told me that he was born in the city, and had never been out of it even for a day. I ordered him two grains of quinine, three times a day, with a powder of eight grains of quinine, to be taken about ten o'clock on the forenoon of the 9th. Not to weary you with details, I may state that in spite of full doses of quinine, given just before the time of the expected paroxysm, he shook on the 9th, 11th and 13th of June. It was not till the 15th that there was any apparent benefit. On this date, all the stages of the disease were much shorter in duration, and not by any means so intense in character; and although on the 17th he had a threatening, no paroxysm occurred. From this date there was no return; but the patient became rapidly anemic, in fact, almost blanched—a very distinct functional murmur being heard over the heart. I then discontinued the quinine, and placed him on iron. His improvement was gradual, and about the middle of July he was able to resume his work. I have not seen him since that time, but know from other sources that there has not been any return of the disease.

Communication.

"POISONED BY MERCURY FROM A TOOTH FILLING."

DEAR SIR :—In the December number of your periodical you have inserted an extract from a Nebraska paper, with the above startling heading. As every dentist in the Dominion, excepting one, use amalgam, and as the case in question, in some measure, reflects upon all those who do; and more especially as the truth of the case appeared in the same

dental journal from which the extract was made, as far back as last April and May, it seems strange that it has not reached you before now. I beg you to give the other side a hearing. Instead of the deceased having been "poisoned by mercury from tooth filling" it was clearly proved that this statement was most intensely absurd; the filling being a single and small one. It was proved that the subject died "of phlegmonous erysipelas. The first symptoms noticed were toothache, with swelled face and neck, for the relief of which a physician was called, who fanned the flame by applying poultices. The inflammation of the peridental membrane extended to the maxillary periosteum, thence to the gums and other soft tissues of the buccal cavity, passed on to the fauces, and perhaps to the glottis, and produced death by apnoea." There is probably not a dentist in this city but can cite cases in his own practice where, had similar treatment not been stopped, and teeth extracted or otherwise treated, would have ended in the same way, and in many instances where there was no filling of any kind in the teeth. *Ne sutor ultra crepidam.*

The direct administration of mercury in any form would not produce symptoms similar to those in so short a time, and to suppose that sufficient of the mercury contained in the filling could evaporate, oxidize, or be converted into a soluble salt by any influence within the mouth to produce fatal salivation is simply ridiculous.

The dentist who filled the tooth was *intoxicated* at the time. The tooth was, no doubt, plastered up with a huge daub of amalgam; the pulp may have been alive and largely exposed, or dead, it makes little difference which; but it is obvious that there was inflammation of the dental periosteum when the patient complained of toothache and swelling, and soreness of the face; and it is equally patent that the same thing would have resulted had the tooth been filled with gold, or any other filling that would hermetically seal the cavity, and prevent the escape of the gas arising from the decomposing pulp or its debris. The prompt extraction of the tooth would have obviated all danger. The true verdict of the coroner's jury should have been that "the deceased came to his death by phlegmonous erysipelas, brought about by the treatment of an inflamed tooth, by Drs. Sprague, Davis and Buffon,"—the three latter being ignorant physicians, *who poulticed the patient to death.* So far J. S. Rice, M.D.

Prof. Cutler, M.D., D.D.S., one of the keenest diagnosticians in the dental profession, and professor of chemistry, microscopy and histology in the New Orleans Dental College, writes in the May No. of

same Journal a very elaborate exposure of the ignorance and unscientific reasoning of those who accused the small amalgam filling as the cause of death. "It does not appear," says Dr. C. "*that mercury had not been taken by the patient before filling the tooth* for some other cause, and the system at that time somewhat under its influence and the salivation a simple coincidence only. It is clear from the evidence that the intoxicated dentist filled the cavity over the base nerve producing all the horrible symptoms described. The same thing would have occurred had gold been used."

"If the medical men in attendance had decided that the amalgam caused the trouble, and the tooth itself was sore and tender, they should have removed the filling or the tooth. If the trouble was that of salivation alone, from the vapour of mercury during the process of hardening of the amalgam, the effect in the mouth *would have been general, not local, nor confined to that tooth at all*, as the action of the vapor would have to take place, first through the lungs, then through the circulation, and locating itself afterwards, as the amalgam itself is not susceptible of producing any specific mercurial action, as no sensible change takes place in a filling in a tooth for a long time, and even then only a slight darkening, the result of *an oxide of silver, not of mercury, which is an insoluble, innocuous oxide and perfectly harmless anywhere in the body*. The acids of the mouth are too weak to produce salts of the materials of amalgam." Dr. Cutler describes a case which troubled the patient for several years, and in which life was almost despaired of, "in consequence of temporarily stopping a tooth with *gutta percha*. The inflammation at first was erysipelas in character, accompanied with copious salivation, *very similar to mercurialization* though I am not aware that the patient had taken mercury any time very recently before the occurrence. Without the closest attention and treatment, I believe the patient would have died from suffocation in consequence of the gutta percha filling."

A couple of pages more follow; but the above will suffice to give your readers the other side of the story.

W. G. B.

Progress of Medical Science.

TREATMENT OF RIGIDITY OF THE OS UTERI.

BY A. B. ISHAM, M.D.

In speaking of the therapeutical means upon which we may most confidently rely as safe, reliable, and

entirely suited to the ends to be accomplished, Dr. Isham, for purposes of convenience, divides them into four classes:—

1. Those which may assist the inherent expansile power of the os.
2. Those which may bring about dilatation by pressure.
3. Those which may aid dilatation by producing muscular traction upon the os.
4. Those which may combine the aid of all the factors engaged in dilatation.

Therapeutic Agents of the First Class.—A continuous current of water, either warm or cold, applied separately or alternately, is an efficient means of producing an expansion of the os. It acts directly as an excitant of the circular fibres of the os and cervix, and it undoubtedly also secondarily brings into action the other forces of dilatation.

Burnes' water bag is a mechanical agent of great value, operating the same way as the water current, with the additional power of expanding pressure applied equally to all parts of the os.

The *electro-galvanic current* passed over the os furnishes another powerful stimulus to the nervomotor function, acting remotely in the same way as the other remedies of this class.

Agents of the Second Class.—*External pressure* upon the abdominal walls over the uterus, if well applied, supplies a power lacking in the uterine muscles, forcing down the contents of the womb against the os and substituting an artificial pressure of considerable power for the natural one.

Forceps may be called to aid if there is sufficient dilatation for their introduction. They afford a mighty power in traction, supplying from without the force wanting within, and producing gradual dilatation over them.

Agents of the Third Class.—*Chloroform* has the weight of high authority as being one of the first therapeutical agents, administered by inhalation in the treatment of complicated labor. Carried to full anaesthesia it perfectly relaxes every tissue in the whole system, and its efficiency in relieving spasm is manifest. It would thus enable the os uteri to be dilated by mechanical means, supplanting the place of all the natural forces of dilatation, and rendering delivery possible by instrumental aid. It has also another property, that of putting in abeyance the cerebro-spinal nervous sense, thereby undoing spasmodic action, while the play of muscular force may continue in operation. In this way it is a useful means of overcoming antagonism of uterine muscles. That chloroform is not applicable to debilitated subjects is apparent.

Sulphuric ether has properties analogous to chloroform, but it is considered by many to be the less hazardous remedy. They are both agents not to be trifled with, for, carried too far, they may produce paralysis of the heart or respiratory apparatus.

Hydrate of Chloral is a grand addendum to our therapeutical means. By its contact with the alkalies in the blood the chloroform is liberated. In doses of x grs. to 3 ss, repeated, if necessary, it quiets spasmodic action, restores balance to muscular effort,

gives ease and sleep to the patient, while it in no way interferes with the natural play of the uterine muscles—labor quietly proceeding under its influence. It is easier of administration than chloroform or sulphuric ether, much safer, and in most cases as efficient. Where there is a great gastric irritability, its use would seem to be contra-indicated.

Hypodermic injections of morphia have a speedy and reliable influence in suspending spasm and contraction of uterine muscles. They put a lock upon muscular action by rendering unconscious the muscular nervous sense, and thereby enable the muscles to recuperate their wasted energies. Morphia may be given *per orem* for the same purpose; but where speedy action is desired, or where there is gastric disturbance, the hypodermic method is preferable.

Opium has the same action as its alkaloid, morphia, but the latter is preferable on account of its smaller dose, and its more certain and speedy action.

Agents of the fourth Class.—Rupture of the membranes, where there is a deficiency of pressure against the os, constitutes a measure of great value—it enables the presenting part to engage advantageously, and furnishes leverage to bring into play the third factor of dilatation. This means may also operate upon the inherent expansile power of muscles of the cervix by letting down the presenting part against it to produce excitation of the nervi-motor function.

Stimulants and tonics, which, through the blood, give tone and vigor to all parts of the system, as alcoholic liquors, extract of meat, ammonia, quinia, and strychnia (operating through the spinal nervous system), are all invaluable remedies in inertia uteri. They give new life to the dormant muscles, and enable them to make the traction needed, to produce pressure, and to stimulate the nervous influence—all the factors in the process of dilatation.

Galvanism has been alluded to as an agent of the first class. By its action upon the nervous influence it may combine all the agencies entering into the expansion of the os uteri. The current should be applied by one pole to the external surface of the os, while the other is placed over the abdomen in front of the uterus, and gradually swept around to the spine, over the sacrum and lumbar vertebræ.

Ergot of rye has a well-settled power of stimulating contractions. Its mode of action, after much discussion, is not well ascertained. It may be administered by the mouth in any of the several ways in which it is prepared.

Tartar emetic, given in minute doses, often exerts a beneficial effect in relaxing rigidity of the os. Its physiological properties in this connection are not well understood.

ON THE USE OF THE PULVIS GLYCYRRHIZÆ COMPOSITUS, A LAXATIVE PREPARATION OF THE PRUSSIAN PHARMACOPEIA.

BY DAVID PAGE, M.B., EDIN., *Kirkby Lonsdale, Westmoreland.*

THE want of a mild but effective aperient, of convenient form, and without any of the disagreeable

concomitants of most preparations of this class, frequently confronts the physician when he casts about him to meet a case of simple constipation with what he cannot readily discover, a pleasant remedy. "Cite, tute, et jueunde," may be said, I think, of the way in which the elegant preparation under consideration acts.

About two years ago I first became acquainted with the compound liquorice powder through Dr. J. Warburton, Begbie, and, since then, I have, I may say, daily tested its efficacy as an excellent laxative medicine.

The majority of cases of constipation arise from simple or functional derangement, and perhaps in all of these a loss of power or atony of the colon is the faulty source.

In the aged, this condition is properly coincident with the gradual cessation of activity generally in the bodily functions; but in the young, more avoidable or accidental causes are at work, such as sedentary habits, irregularity, debility from other illnesses, and the like.

With regard to other cases of constipation, which can be traced to a deranged state of the upper intestine, catarrhal conditions are most frequently observed, and I have met with no more inveterate instances of this sort than those occurring in patients whose rule of life seemed to embrace the persistent use of the numberless quack purgative nostrums.

I may with truth remark, in passing, that, in England at least, more disorders of the primæ viæ come under the eye of the physician from this one cause than from all the natural and inimical agencies put together. (1)

For the treatment of simple constipation resulting from atony of the bowel, the compound liquorice powder is admirably adapted. Whether in simple uncomplicated torpor of the intestines, or in constipation accompanying temporary gastric disorder, the powder, alone or auxiliary to appropriate remedies, is preferable to other preparations of its class. In the former, our object is rather to call into play the peristaltic action of the intestine than to deplete by serous transudation from its walls, and, in the latter especially, no prudent practitioner would run the risk of aggravating the disordered stomach by the exhibition of purgatives possessed of irritant or drastic properties. The compound liquorice powder is composed of the following constituents, so prepared as to form when incorporated an almost impalpable powder:—Senna leaves, \mathfrak{z} vj; liquorice root, \mathfrak{z} vj; fennel seeds, \mathfrak{z} iij; sulphur, \mathfrak{z} 3iij; refined sugar, \mathfrak{z} xvij. (2)

The active ingredients are sulphur and senna. The action of the former, when administered alone,

(1) In the fourth volume of his *Clinical Medicine*, speaking of constipation, Trousseau remarks: "The use of these pills, (aloes, colocynth, gamboge, and rhubarb) is certainly less injurious than is generally supposed; and the abuse of them in England shows that we, on this side of the Channel, are inclined to exaggerate their evil effects."

(2) This formula is given in the *Pharmacopœia Borussica*.

is frequently accompanied by tormina, and the continued use is apt to cause derangement of the mucous membrane of the upper intestine. The physiological action of sulphur appears to be upon the muscular coat, and less upon the mucous surface, while senna is a more active purgative, more apt to excite tormina, and acts more upon the mucous than the muscular coat. By the aromatic and stimulant properties of the fennel, and the demulcent action of the liquorice, itself a mild laxative, the effects of the more active constituents are judiciously modified.

The usual dose is a small teaspoonful at bed-time in water, with which it is easily mixable, forming an agreeable draught. Children to whom Gregory's powder is a terror, readily take it with the belief that it is a sweetmeat.

That the action of the powder is not to produce catharsis with serous transudation is proved by the motions, which are usually well formed and soft.

It is not my intention to enter into details of individual cases, but I cannot refrain from alluding to one instance as illustrative of a group where its use is preferable to other forms of purgative remedies.

Two years ago I saw with a practitioner in York a maiden lady, seventy years of age, who for some time had suffered from general paresis as indicated by ptosis of both eyelids, defective eyesight, habitual constipation, and difficulty of deglutition, especially of solids. I found that the taking of pills was to her a constant source of dread and annoyance, and suggested the compound liquorice powder, the adoption of which proved so pleasant and satisfactory that it was afterwards taken to the exclusion of the pills.

I have said that constipation most commonly results from functional derangement. Constipation connected with the simpler forms of structural disease, such as piles, fissures of the anus, and prolapsus, is also effectually treated by the powder; and in those grave cases, happily less frequent, but the saddest of all that the physician is called upon to treat, where structural changes within or without the bowel are slowly but surely encroaching upon its calibre, the constipation that gradually appears may for a time find relief in the same manner; although at a later stage, when the symptoms, formerly obscure, become so developed as to afford certain proof of the existence of an invariable obstruction, we must desist from harassing the patient with general remedies, and fall back upon the forlorn hope of local means.

In the early stages of hepatic disease, when the tympanitic state of the bowels masked long-existing ascites, and on the treatment of which Dr. Basham has lately contributed papers to the *Practitioner*, I have found the use of somewhat larger doses of the compound liquorice powder, twice a week, or so, equally beneficial, and in my opinion preferable to that of mercury, jalap, colocynt, or podophyllin.

The general treatment of constipation must not be lost to view; and while the use of any purgative whatever can only rank as a temporary expedient, the all-important observance of a well-arranged dietary, exercise, and habits of regularity, must be

considered of paramount necessity in the attainment of permanent relief.

Dr. Warburton Begbie, writing to me lately, says:—

"Your experience of the compound liquorice powder fully confirms my own, and that in every particular. I have found it specially useful as a laxative in *young* and *old* subjects, and have formed a high opinion of its efficiency as a medicine in cases of atony of the bowels determining constipation.

"You are correct in supposing that it was introduced into practice here by me.

"I had the prescription from a gentleman long resident in Breslau, for whom the powder had been ordered by the distinguished Hasse.

"Many friends like yourself have borne a strong testimony to its efficiency.

"It is certainly an admirably arranged powder."

CLINICAL THERMOMETRY.

BY LUCIUS D. BULKLEY.

At a meeting of the Medical Society of the County of New York, February 26, Dr. Lucius D. Bulkley read a long and elaborate paper upon this subject, illustrated by numerous mural diagrams and tables.

The number of cases in which a record of temperature was regularly kept amounted to 337, classified as follows; typhoid fever, 93; typhus fever, 23; pneumonia, 64; erysipelas, 24; acute rheumatism; 17; remittent fever, 12; intermittent fever, 7; scarlet fever, 7; phthisis, 19; acute meningitis, 9; tonsillitis, 7; peritonitis, 6; miscellaneous, 49. Besides the temperature, the pulse and respiration were always recorded, and the doctor had tabulated all the cases under each disease with reference to these three vital signs.

The nature of the paper precludes any extended extract. We confine ourselves to the doctor's concluding summary of the chief points he considers established:

"1. The body heat is maintained in health, under all conditions, at the uniform standard of 98.4° Fahr.

"2. Any constant deviation from this constitutes disease.

"3. A return to and continuance at this standard marks the determination of the disease.

"4. A single high temperature is important.

"5. The changes of temperature in diseases follow definite and known courses.

"6. Variations from these typical ranges of temperature in disease are significant, as indicating a disturbing cause.

"7. An irregular course is more unfavorable than a uniformly high range of temperature.

"8. Different temperatures characterize different diseases, and various days of the same disease.

"9. Although a high temperature indicates a more severe attack, no heat under 109° can be considered surely fatal.

"10. The daily study of the pulse and respiration

in connection with the temperature is of great assistance.

"11. When the temperature and general symptoms agree, but the pulse disagrees, the two former are to be relied on.

"12. When the pulse and general symptoms agree in indicating unfavorably, the temperature cannot be relied on, if contradictory, unless the improvement in respect to temperature is marked and persistent.

"13. When pulse and general symptoms agree in a favorable indication, a high or rising temperature should arrest attention.

"14. All other means of investigation should be used in connection with the temperature to obtain the greatest benefit from the latter.

"15. The continuous daily record of the three vital signs here represented, in the way exhibited, affords much aid in the diagnosis, prognosis, and treatment of disease, by the presentation to the eye of its history in these respects.

"16. The systematic record of these three points may assist in determining, at some future day, the vexed question whether the type of disease is changing, by preserving pictures which can be easily compared."—*Medical Record, New York.*

BROMIDE OF POTASSIUM IN EPILEPSY—A CONTRAST DURING A FRENCH CAMPAIGN.

THE distinguished psychologist, M. Legrand Du Saulle, of the Bicêtre, in a communication to the *Gazette des Hôpitaux* of February 20 and 23, furnishes an interesting review of the results of his employment of the bromide of potassium in 207 cases of epilepsy.

The bromide, he says, does not produce any mischievous effects, provided that it is of irreproachable chemical purity, and that its operation be attentively watched by the Practitioner—say, every fortnight. He has patients who have been taking from one to two drachms daily for a very long period without any ill-effect upon their health. Frontal cephalalgia, stuffing of the nares, lacrymation, gastric irritation, loss of strength, torpor of movement, acne, partial abolition of general sensibility, indifference, apathy, somnolence, intellectual obtuseness, stupor, inordinate appetite, constipation, and especially emaciation, have been justly indicated as consequences of its employment; but such effects have only been produced when the bromide has been of doubtful quality or has been ill-administered. If we place ourselves under favourable conditions for carrying on the experiment, we are not long in finding out that it may become as the daily bread of the patient, and so far from inducing emaciation, it rather favours the gain of flesh. It must, however, be well borne in mind that when, even with the purest salts, the daily dose of one drachm is approached, the reflex sensibility of the pharynx, base of the tongue, and epiglottis is considerably diminished or abolished, and that the genital desire is sensibly blunted. It is at about the same dose that acne commences, and it is an error to suppose that its intensity should influence the prognosis.

If the dose be too large at first, or too rapidly increased, bromism may be easily induced. M. Legrand commences with from twenty to thirty grains a day, and, according to the nature of the case, increases this by from seven to fifteen grains every fortnight or month—"mounting only slowly the steps of the therapeutical ladder." The ultimate daily quantity which he reaches oscillates between ninety and 135 grains, but to attain this from three to six months are required. In one case only was a maximum of 210 grains reached, but for this twenty-six months of treatment were required. While at least from sixty to seventy-five grains daily will be required for males before any efficacious therapeutical effect will have been attained, in young girls and women well-marked and sufficient action may be obtained by from forty-five to sixty-five grains.

In 207 cases in which he has used the bromide, the following results were obtained:—In seventeen, absolute suspension of all epileptic symptoms during from two to four years; in twenty-eight, absolute suspension from twelve to twenty-two months; in thirty-three, considerable amelioration, no epileptic attack having occurred from six to ten months; in nineteen, a relative amelioration, the remission lasting from two to six months, and the various symptoms being much abated in severity; in 110, failure. This last item is rendered larger by the inclusion of patients that have been too short a time under observation to speak positively about; others who have been lost sight of during recent events, and others, again, for whom the medicine proved too dear to secure their perseverance with it. The proportion of cures is sensibly greater in private practice than in the Bicêtre or Salpêtrière, most of these last presenting cerebral complications. In the unsuccessful cases, also, the bromide often abates much of the violence of the symptoms.

When an epileptic has passed a year without an attack, M. Legrand administers the bromide only on alternate days during the first half of the month, and every day during the second half; and, after eighteen months' suspension of attacks, he gives it every third day during the first, and every day during the second half of the month. At the end of the second year it is given every fourth day during the first fortnight, and so on. He considers a rigid perseverance in this plan essential, and believes the usual plan of administering decreasing doses as improvement occurs a deplorable error. Relapse is sure to occur if any truce be thus given to this obstinate disease, the bromide being, as already said, as it were, the daily bread of the epileptic. Medical superintendence during its employment is always essential; and surreptitious augmentation of the dose, as sometimes practised by patients, may lead to aggravated symptoms. The acne which accompanies the use of the medicine is often very obstinate, and ignorance of its bromic nature has led the useless employment of various agents. Great fetidity of breath attends the prolonged use of the bromide, and this is best met by taking it only a minute or two before meal, or receiving it as an enema twenty minutes before.

TREATMENT OF PLEURISY.

In the course of his lectures entitled "Sketches of Success and Failure in Medicine," Dr. C. J. B. Williams observes that the treatment which is successful in a large proportion of cases of acute pleurisy is chiefly antiphlogistic, and more local than pneumonia. Venesection is required only in the plethoric and robust, and then only in the earliest stage of the sthenic form; but leeches or cupping may be used with advantage so long as there is pain with increased temperature. In very many cases there is little or no heat of skin; and in these he prefers a large blister at once, keeping it on not more than six or eight hours, and following it with a large poultice covered with oiled silk. This promotes the discharge from the blistered surface, and acting as a comfortable fomentation on the side, may well be continued till the parts are ready for further blistering, should it be required. Of internal medicines, mercurial and saline diuretics are the best for the early stage of inflammation. If there be severe pain, he gives a few doses of calomel combined with morphia, till the pain is relieved, and then substitutes small doses of blue pill, with squill and digitalis, two or three times a day, until an effect is produced on the bowels, kidneys, or gums. Salivation is by no means necessary or desirable, the best operation of mercury being on the liver and kidneys; and when these are brought to act freely, the effusion, if serous, generally is stayed and will diminish, quickly in some cases and very slowly in others, without any further active treatment. Saline diuretics of citrate and nitrate, or acetate of potash, are useful in most cases. In mild forms of the disease mercury is not necessary; blisters and saline diuretics are sufficient, and may soon be changed for iodide of potassium in a bitter infusion, with daily painting the affected side with tincture of iodine. But sometimes cases of extensive pleuritic effusion are met with, which, either from original intensity or from not having been treated soon enough, will not yield to any or all of these remedies; and whenever the effusion is not so much as to cause such distress in breathing as to interfere with the comfort of the patient and especially to prevent sleep, there should be no delay in puncturing the chest. We may be more confirmed in recommending this treatment if the symptoms render it probable that the effusion is purulent, and it may be often guessed that this is the case when there is general pallor, with partial hectic flush, alternations of chills and sweats, very frequent pulse, much weakness and tremulousness of movement, and more than usual tenderness and puffy feelings of the walls of the affected side. In cases in which the nature of the effusion is doubtful, the grooved needle may be introduced to settle the point; but Dr. Williams says that in all cases where there is great and continued effusion—such as to prevent sleep—the operation should be performed, whether the effusion is purulous or serous only. In cases of serous effusion, tapping to the removal of two or three points may be enough to relieve the oppression. The respiration and circulation being thus set free, the rest will probably be absorbed. But

in cases of empyema it is desirable to evacuate more matter, and repeated operations may be required. Dr. Williams' experience is in favor of avoiding the admission of air if possible, and for this purpose the simplest and most effectual means is the attachment to the canula of the trochar of a few inches of a perfectly flaccid tube, such as rabbit's intestine, or soft thin india-rubber, which permits the liquid to flow downwards freely, but, collapsing as the current flags, effectually prevents any air from passing upwards. After the operation the treatment should be of a sustaining kind. A course of cod-liver oil with a mild tonic, a generous but not too stimulating diet, and moderate exercise in a healthy air, greatly conduce to convalescence, and may prevent many evil consequences. In cases of empyema with a permanent opening in the chest, little improvement may take place till the patient goes to a healthy country place or to the sea side; and then the discharge soon begins to diminish, and the health and strength are simultaneously improved.—*Medical Times and Gazette*, March 23.

QUININE COMPARED WITH ERGOT.

It is well known amongst practical men in England that sulphate of quinine has certain effects on the womb, of which it is well to be aware—for instance, that if given to young girls it is apt to make the menstruation painful and scanty. Dr. Angelo Monteverdi, of Cremona, has treated of this matter at length in a lately published treatise, (a) of which the following are the conclusions:—Bark and its preparations act first on the sympathetic, then on the spinal nerves. Thus it produces contraction of the muscular fibres supplied by the great sympathetic, and especially of the womb, bladder, intestines, and bloodvessels. Its effects depend on the dose, and on the condition of the organs acted on. It may restore relaxed organs to their normal state of tone; or if the tone of these organs be already sufficient, it may induce morbid and excessive contraction. This is shown by its action on the pregnant womb, and especially during parturition. It may, administered imprudently, cause abortion; but in case of languid and feeble uterine contraction it may accelerate childbirth, and cause the normal expulsion of the placenta. Dr. Monteverdi believes it to be far preferable to the ergot, and less detrimental to mother and child. It takes the place of the ergot in all relaxed contractions of the womb—menorrhagia, amenorrhœa, and the like. It is the best preventive of puerperal fever, and the best remedy for its early stages. It is injurious in all cases of uterine excitation. These are the conclusions of Dr. Monteverdi, supported by many cases and by abundance of argument. Without doubt he demonstrates the effect of quinine on the womb; but he fails to show that for rapidity, certainty, and power of action it is at all comparable to the ergot as a parturient. Nevertheless, the hints here given, and especially on the possibility of causing dysmenorrhœa or abortion, are worthy the attention of the circumspect Practitioner.—*Medical Times and Gazette*.

CHRONIC URETHRAL DISCHARGES.

F. N. Otis, M.D., N. Y. (*N. Y. Med. Journal*), in an article on "Chronic Urethral Discharge," gives us his treatment as follows: When, after a longer or shorter time, the acute symptoms of an attack of gonorrhœa have subsided, and there remains simply a purulent or muco purulent painless discharge, examination should be carefully instituted with the view to ascertain the exact point to which the disease has extended, and, as nearly as possible, the pathological condition upon which the continuance of the discharge depends.

The indications for treatment are to apply such local measures as are most likely to diminish the excess of fluid, and to stimulate the membrane to a more complete performance of its functions. Solutions of the salts of zinc, lead, and iron, combining the astringent and stimulating properties in various degrees, are found well calculated to meet this double requirement. Vegetable tonics and astringents are found also of value. The more thoroughly the epithelial products in the discharges are degenerated, the more stimulating and astringent is the application required to be. When the discharge is not wholly without pain, he is accustomed to add 2 or 3 grains of the extract of belladonna to the following solution: Sulphate of zinc, or the acetate of lead, alone or in combination, and of a strength varying from one to three grains to the ounce of distilled water. When the discharge is small in quantity and chiefly mucous, the acetate of lead, grains one to three; the persulphate of iron, grains three to five; tannic acid, from five to ten, are often promptly efficacious.

He has seen positive benefit in quite a number of cases where a solution of two or three grains of phenol to the ounce of water has been used.

CHLORODYNE.

We proceed to redeem our promise to give an exact formula by which this proprietary medicine may be prepared. We may premise that careful investigation enabled us to decide upon the general composition of the article, but that the following prescription was actually prepared by a pharmacien in the East, just before chloridyne was so extensively advertised:—

- R. Morph. mur., gr. xvj.
 Acidi perchlor., m xl.
 Tinet. lobelia, 3 ij.
 Tinct. capsici, 3 j.
 Ol. m. pip., gtt. vj.
 Chloroform, f. 5 j.
 Ac. hydrocy, Scheele, m. xxiv.
 Theriac, q. s.
 Aq. ferventis, ad 5 iv.

M. Dissolve the morphia in the acid and hot water; then add the other ingredients.

After careful experimentation we find that a more uniform result will be obtained by ordering three ounces, by weight, of treacle instead of the indefinite *quant. suf.* Half a drachm of the product contains a quarter of a grain of the morphia salt.—*Doctor, June 1, 1872.*

THE CANADA MEDICAL RECORD

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EDITOR:

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THE AMALGAM QUESTION.

In our November number, we inserted, at the request of one of our subscribers, a paragraph which appeared in the *Dental Register*, published at Cincinnati, in which it was made to appear that a certain individual had died from the most intense salivation, produced by the introduction of this now somewhat noted mercurial amalgam into one of his teeth. As we anticipated, the insertion of this paragraph has produced a letter signed W. G. B., initials of one of our well-known dentists, in which he gives the opposite side of the question, quoting from two articles, which appeared in the same *Dental Register*, reviewing and criticising the verdict of the Coroner's Jury, and the statements of the first paragraph. As we have not the slightest intention to become further involved in this now somewhat celebrated dispute which has produced a law suit, and as both sides have been able once more to put in an appearance, we shall not insert anything more on the subject. We, however, think there would not have been any harm if W. G. B. had quoted the following additional paragraph from the article of Dr. Rice, giving as it does his opinion of the value of the preparation. "Amalgam has many faults, and few advantages, and every conscientious dentist should disdain its use, except in cases that are few and far between."

TO OUR SUBSCRIBERS.

With this number we complete the first half year of the *Record*, and we are happy to be able to announce that its success has been beyond our most sanguine anticipations. Ushered somewhat hurriedly and unexpectedly into existence, there was no time to make a special effort to extend its circulation, nor has any been made since. Yet it has been quietly, yet surely, working its way, till at this moment our circulation is within a fraction of being double that of the old *Canada Medical Journal*. To many of our friends throughout the country, who have aided in extending our circulation, we owe many thanks, which we heartily tender them.

We are now unable to supply complete sets of the

Record, and new subscribers will be furnished from the present issue to the close of the Volume, at \$1.00.

With the present number, we send accounts to all our City subscribers. Next month they will be forwarded to our subscribers in the country. To all we wish the compliments of the season.

AN ANTI-VACCINATION MOVEMENT.

We had hoped that, after the utterly complete and disgraceful route which the corporals guard of English anti-vaccinationists received at the hands of the committee of the British House of Commons, appointed to investigate their complaints, no men possessed of ordinary common sense would again be found, raising their standard. We have, however been mistaken, and once more has the old proverb "that it takes queer people to make a world," been aptly illustrated. In the city of Montreal, where, above all other places in Canada, that we know of, the value of vaccination and re-vaccination has been proved, Dr. Coderre has found followers who have actually been bold enough to petition Parliament lately in session at Quebec, for a repeal of the compulsory vaccination act. That the medical man whose name we have just mentioned should take this course does not the least surprise us, but we confess that we are more than astonished to find the name of L. A. Jetté, the recently elected member for East Montreal, among the petitioners. That section of the city was the local of eighty per cent. of the cases of small-pox, which occurred last winter, and the intelligent people of Montreal know the reason why. It is sadly out of taste for the newly elected member, even before he has taken his seat, to place himself in the front rank to oppose that which the scientific intelligence of the world has pronounced beneficial. It is certainly a blot upon our escutcheon, that any representative of our city should attempt to lead a movement, which, should it succeed—of which there is not, we are glad to say, the remotest chance—would throw us back three quarters of a century in the march of civilization. And this too from a liberal candidate, a member of the great party of union and progress. A queer world indeed, in which queer terms are used to designate political parties.

TO CORRESPONDENTS.

A communication, signed *A Young Physician*, is received, but cannot be inserted till we receive the author's name. This is an invariable rule, and will not be deviated from.

CYANO-PANCREATINE.

We very willingly draw the attention of the profession to the preparation which bears the above name, and for which Messrs. Evans, Mercer & Co. are the wholesale agents. It is prepared by the Sisters of the Grey Nunnery, and is really a very elegant and valuable preparation in those diseases, for which it is specially recommended.

PERSONAL.

Dr. C. W. Covernton of Simcoe, member of the Ontario Medical Council for the territorial division of Gore and Thames, was in Montreal, the middle of December. He visited the various Medical Institutions of the City, and met a few medical friends at lunch at the residence of a prominent practitioner.

Dr. Proudfoot, graduate of McGill University, intends establishing himself in Montreal, as an oculist.

Reviews.

LITHOTOMY AND LITHOTRITY.—Illustrated by cases in the practice of Gordon Buck, M.D., Visiting Surgeon to the New York Hospital and Presbyterian Hospital; Consulting Surgeon to the Roosevelt Hospital and St. Luke's Hospital. P. 59. 1872. New York, William Wood & Co., 27 Great Jones Street: Montreal, Dawson Brothers.

As the author observes: "Lithotomy and lithotritry are the two principal methods upon which surgeons rely for the removal of calculus from the urinary bladder. Other methods have only a special and very limited application, and are scarcely taken into account in deciding the question of the choice of methods." In reading the excellent little monograph by Dr. Buck, this choice is much facilitated. The author is not prejudiced in favor of either method, but divides his cases into several groups, which he treats accordingly: the first, "comprising cases in which the moderate size of the calculus, and a favorable condition of the urethra and bladder, as also of the general system, indicated lithotritry as preferable to lithotomy;" the second being "cases where the stone was large, though soft; the bladder healthy; and the urethra capacious—a concurrence of circumstances permitting the successful employment of lithotritry;" the third group comprising "cases in which, from the unfavorable condition of the bladder or urethra, or from the large size and hard composition of the calculus, lithotomy should be resorted

to in preference to lithotritry." In the *first* group of twenty-four cases there were two deaths, only one of which, however, could be attributed to the operation. In the *second* group there were six cases, all of which were successful. In the *third* group there were fourteen cases and eight deaths. The average number of deaths in the three groups was one in six and one-ninth cases—not a very brilliant result it must be admitted. But, if we exclude the third group of cases—cases in which the condition of the bladder and urethra, and the large and hard composition of the stone, alike forbid resort to the lithoclast, then we find groups one and two, comprising thirty-one cases, giving but two deaths. And, as the author claims, "if to this be added twelve relapses, the aggregate of cases is increased to forty-one, and the rate of mortality further reduced to one in twenty and a-half." We think Dr. Buck erred in submitting the cases in the third group to the action of the lithotrite. They were cases clearly belonging to the lithotomist, and the severe disturbance of the bladder lit up by, as he says, "a single crushing easily and promptly performed," showed their ineligibility to the kind of operation to which they were subjected. Yet is it difficult sometimes to predict these disturbances, and, when they do occur, and go on to a fatal termination, it is equally difficult to explain their symptoms on the pathological conditions found after death, where no "abrasion of the lining mucous membrane of the bladder was detected.

The author, from an observance of fifty cases, draws certain conclusions, which are thus stated:—

1. "For patients under seventeen years of age lithotomy should be preferred. Its results, heretofore, in such cases, have been so favorable as scarcely to leave any other resource to be desired, especially now that we possess the inestimable auxiliary advantage afforded by anæsthesia. The only exception admissible to this rule might be a case not under ten years of age, in which a stone was ascertained, by measurement with a lithotrite, not to exceed one-half to three-fourths of an inch in diameter, and which might therefore very probably be gotten rid of by a single operation."

2. "For adults lithotritry is most advantageously employed when a moderate sized calculus, co-existing with a favorable condition of the urinary organs and general system; also, where a like favorable condition of the local and general system co-exists with a calculus of large size, but not of hard consistency."

3. "If a calculus be found by the lithotrite to be very hard, and to measure one inch or more in diameter, though at the same time other favorable con-

ditions may co-exist, lithotomy should be preferred as affording the patient the best chance of a good result."

4. "Great difficulty in passing the neck of the bladder with the lithotrite, whether for enlargement of the prostrate, or from a fixed position of the stone itself, should deter from the employment of the lithotritry."

5. "In a debilitated or reduced state of the system from purulent cystitis and protracted suffering, irrespective of the size of the stone, lithotomy should be preferred. Emptying the bladder instantaneously of its foreign contents, and putting it at rest by draining off the urinary secretion, will afford the patient, in such condition, the best chance to rally and recover."

6. In a case of stricture of the urethra its complete cure should be a preliminary step to the employment of lithotritry.

In the author's directions for seizing and crushing the stone, we think he errs in advising to "proceed to seize the stone without first sounding for it." We should rather advise sounding for and finding it, before proceeding to crushing. With his other suggestions we entirely agree, particularly with his advice to *rotate* the instrument, with the stone held securely to make sure that no part of the bladder is seized with it. Another rule which the author recommends and which might generally be followed with advantage, is this: not to continue the lithotrite in the bladder for a longer period than five minutes, whether the stone had been seized or not. This rule should not be absolute, for a much longer continued attempt to seize and crush might be well borne in some cases, while a shorter period might be productive of irritation in others. The tact and judgment, however, requisite to fit a surgeon for the performance of this, unquestionably one of the most delicate operations must be trusted to. A careful review of these cases, a synopsis of which we have here given, leads us to adopt the views now generally entertained, and which the author thus expresses: "Lithotomy and lithotritry are not to be regarded as rival methods, one of which is destined to supersede the other, but they are rather to be viewed as supplementing each other, each having its special application to peculiar conditions which should be carefully discriminated." And the author, in his unpretending little pamphlet, has added something to our means of discriminating those cases which should be submitted to the knife from those which may properly be left to the lithotrite.

AURAL CATARRH AND CURABLE DEAFNESS. By Peter Allen, M.D., F.R.S., Edin., M.R.C.S., Eng., Aural Surgeon to, and Lecturer on Aural Surgery, at St. Mary's Hospital, and Aural Surgeon to the Royal Society of Musicians. William Wood & Co., 27 Great Jones Street, New York: Montreal, Dawson Brothers.

The study of aural medicine and aural surgery has long occupied an inferior and neglected position, and has not kept pace with other lines of scientific medical investigation. Why it should be so, may be in the fact, that teaching bodies, with few exceptions, have practically ignored its importance, and also, perhaps, at the examinations, candidates have not been tested therein. The sister study of the eye has far outstripped it, and ophthalmic surgeons of eminence are to be found in almost every country. Had it not been for the labours of Toynbee, Pollitzer, Wilde, Meyer, and others, the profession would yet be groping in the dark, in a most lamentable manner. Any addition to the literature of the subject is to be hailed with gratitude, and it was with feelings of satisfaction we read Dr. Allen's work, particularly since it treats upon that portion of the subject the profession is likely to know least about. Dr. Allen, from his position at St. Mary's Hospital, has had ample opportunities to collect all the material necessary for such a work. He treats altogether of the "Middle ear, including the membrana tympani, the region most commonly affected in aural catarrh." He divides aural catarrh into three classes:

I. Simple aural catarrh, or catarrhal inflammation of the mucous membrane of the cavitas tympani, membrana tympani, eustachian tube and mastoid cells. This form may be divided into acute and chronic.

II. Purulent aural catarrh, or otitis, also acute and chronic.

III. Oborrhœa, aural polypi, &c., or the results of purulent aural catarrh.

This arrangement is simple, and all confusion is avoided. His treatment is admirable, and such as will recommend itself to all who read the work. He is opposed to mercury, and considers it of little use. He says: "Recollect that the constitutional peculiarities commonly met with in patients who are the subjects of catarrh of the middle ear are such as totally unfit them to endure the so-called 'strictly antiphlogistic' measures recommended in almost all works on ear diseases."

"Weakly children and strumous young persons cannot bear well the frequent dosing with calomel or

even the grey powder—the usual panacea, according to popular belief, in all inflammatory complaints. A patient suffering from catarrhal disease of the ear is commonly disordered in general health; especially are the digestive functions disturbed."

There are several illustrations demonstrating the anatomy of the parts and the method of using instruments. He gives a long chapter on catheterism, with the necessary precautions, and gives hints, not mentioned in books, that old practitioners would do well to give heed to.

The book is practical throughout, and practitioners who have a large practice, and who must, of necessity, have a good many patients suffering from aural catarrh consulting them, would do well to add it to their library.

THE VIENNA HOSPITAL; treatment of VENEREAL DISEASE, by M. H. HENRY, M.D., Surgeon to the Venereal Department of the New York Dispensary, adapted and arranged from the German. New York: William Wood & Co. Montreal: Dawson Brothers.

This monograph first appeared in the "American Journal of Syphilography and Dermatology," for April of last year. The interest it then excited induced the compiler to issue it on a more permanent form, hence the present very neat little volume of some fifty pages. The Vienna Hospital for the treatment of venereal affections is very probably the largest and best appointed in the world. It follows, of course, that a resume of the experience gained in that extensive establishment cannot fail to be extremely valuable and serviceable to all who are engaged in the treatment of this class of disease. The details of the treatment are extremely minute, and all the more valuable on this account. About two hundred formulæ are given, and the only fault in the work seems to be in this section. In our very humble opinion so many similar formulæ are given as rather to perplex than assist the practitioner. With this exception it is an admirable little volume.

LESSONS IN PHYSICAL DIAGNOSIS; by ALFRED L. LOOMIS, M.D., Professor of Institutes and Practice of Medicine in the Medical Department of the University of New York, Physician to the Bellevue and Charity Hospitals, &c., &c. Third Edition, revised and enlarged: William Wood, & Co., Publishers, 27 Great Jones Street, New York, 1872.

Through the courtesy of the publishers we have received a copy of this valuable work, and the fact

that a third edition has been called for in the short time that has elapsed since the first was published marks its great usefulness.

During his attendance at College, the student has so many subjects to engage his attention it is almost impossible for him to understand the various symptoms of disease—which are often so similar in different cases—that are taught him, that a concise work like Loomis' is of great value, and even older practitioners will find it of useful service. The lessons on Mechanical aid to Diagnosis are new and pertinent, and will well repay the time occupied in studying them. It is illustrated with excellent wood cuts, beautifully printed on good paper, and neatly bound—as are all works that emanate from the establishment of the Messrs. Wood.

Reports of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

MEETING HELD NOVEMBER 30TH, 1872.

Dr. REDDY, Vice-President, in the chair.

After reading of the minutes, Dr. F. W. Campbell read a report of a case of local ague, which will be found among our original communications.

Dr. SCOTT said in 1842 and 1843, when he was House Surgeon of the Montreal General Hospital, several cases of fever and ague were admitted into that Institution. All were clearly local in their origin, and came from what was known as the *Cavé* or the plateau between St. Catherine and Sherbrooke streets. He had, however, not seen any since that time.

Dr. ROBILLARD said that somewhat recently he had had a case in a child residing in Victoria street. The child was born in Montreal, but had passed a few months at *Riviere du Loup en bas*. At first the child shook every twenty-four hours, and then every forty-eight hours.

Dr. RODDICK mentioned that there was a local case at present in the Hospital, under the care of Dr. Wright, the notes of which were being kept by Dr. Chipman.

Dr. CHIPMAN said it was an undoubted case of tertian ague, in an Irishman who had resided in Montreal during the past three years, but who previously lived for some time in London. He was taken ill five weeks before admission. The chill always came on about one o'clock, so Dr. Wright ordered him half a drachm of chloral, to be taken the morning of the attack. He had taken two or

three doses, but so far no results had followed its employment,

Dr. TRENHOLME stated that he had a case of intermittent fever in a child seven years of age, who was born and had always resided in Montreal. The patient lived in the upper part of St. Urbain street. It was of the tertiary form. It was somewhat remarkable in the fact that every second attack was less severe in character. The child was placed on quinine, and did very well.

Dr. HINGSTON said that were Dr. Drake to re-issue his work on the Diseases of the Valley of North America, he would have to modify the statement that ague was unknown East of Lachine. Last summer (71) he had had two cases in a family residing three miles from Montreal. These two cases had come on after a very dry season, and they resided close to the quarries at Petite Cote. He treated them with quinine. After the close of the American war, he had many cases in hospital of ague in discharged soldiers, and he invariably gave large doses—sometimes thirty grains—just before the attack, seldom less than twenty grains.

Dr. FENWICK stated that in his practice he never gave such large doses. He generally gave a grain three times a day, and about two hours before the expected attack came on, he gave six or eight grains. If this treatment did not succeed the first time, it usually did after a few days.

Dr. REDDY said he always had good results from quinine in doses of thirty grains.

Dr. BESSEY spoke of the cause of intermittent fever, which he believed might be due to the direct influence of marsh vegetation. It had been observed that this fever made its appearance in the vicinity of marshy districts soon after the blooming of a certain *aquatic plant* found growing in marshes in July or August. He had noticed this connection in several localities. Ague was pre-eminently an *autumnal fever*; at least, this had been the result of his own observations, and he thought a connection might be thus traced to the taking into the body of vegetable emanations or organisms. It might be that the *pollen* or *minute spores* wafted in the wind were inhaled, or the *sporules* might be ingested in drinking river water, and this might account for cases occurring in Montreal, where the water came from the upper country, and might contain stray vegetable germs capable of producing the disease.

Dr. MACEWAN (of Carleton Place Junction) stated that, immediately after he graduated, he settled ten miles out of London, and in a very short

time he had fully one hundred and fifty cases of ague. In fact every second case that came to his office was ill with ague. Quinine was the remedy which he found most effectual, in doses of five to ten grains just before the attack, and continued in smaller doses during the interval. It was generally given in solution, and was never known to fail. In four or five days the patients were usually cured. If ill with the disease for some time before commencing the treatment, it did not so readily yield. He tried cinchonine, but did not get on so well with it. It had to be given in large doses, and it did not agree with the stomach. South-west of the place he resided, they were draining a swamp, and in the opinion of many, this was the cause of the great prevalence of ague at that time.

Dr. F. W. CAMPBELL said he was glad he had brought forward his case of ague, for it had been the means of showing that the disease, as a purely local malady, was although rare, not so much so as was believed by many.

Dr. G. A. BAYNES then read a case of injury to the knee-joint. He said :

On the first of August, 1871, I was called to see B. N., a young man aged about 19 years, and moderately muscular. He was the third son of a family of eighteen children, nearly all of whom were more or less inclined to the strumous diathesis. He was returning home, carrying his scythe across his arm, when he stepped into a hole, and fell down upon the scythe with his right knee. It made a clean cut about six inches long, extending from the insertion of the varus internus downwards and outwards, completely severing the patella, through the synovial membrane, obliquely across the joint into the fleshy part of the gastronemius, exposing the cartilagenous surface of the external angle of the femur. I could feel the anterior crucial ligament with my finger. There was not any appearance of shock, and there was but little bleeding,—what there was, was easily checked by torsion. I washed out the wound with carbolic acid lotion (1 to 30) and then brought the parts as nearly in apposition as possible by means of wire sutures. I would have preferred hair lip pins, but was 8 miles away from home, so had to use what I had. I then applied a figure of eight bandage, with a long back splint well padded and bandaged firmly to the leg, preventing any motion whatever. After this was done, he was carried four miles to his own home. I gave an opiate, and left directions to have the lotion constantly applied. I continued the same treatment throughout. On the 12th August, there appeared a slight bagging of pus on the outer edge of the knee,

which after a poultice, I laid freely open. This was the only obstacle to the uninterrupted healing of the wound. At no time during his illness did the pulse exceed 110, and the temperature was normal after the 2nd day; on the 1st and 2nd it varied from 100 to 106 F.

On the 19th August, I removed the splint, and rested the leg on a pillow. On the 2nd September, wound quite healed, and can use his limb pretty freely with the aid of crutches.

I heard of him for the last time on December 17, 1871, when he said that his wounded limb was nearly equal to the other in strength, and quite flexible.

Dr. HINGSTON said that Dr. Bayne's paper showed the liberty that sometimes could be taken with joints. The danger of opening a joint was not so great as was at one time supposed. It was once taught that if air got into a joint it was lost. At Ottawa, in 1870, at the meeting of the Canadian Medical Association, he had read a paper on tapping the knee joint in simple synovitis. He then said that he took no special pains to exclude the air, and had not seen a single case where any bad results had ensued from its admission. In the case of a young man, named Madden, he tapped both knee joints on the same day for acute synovitis. Into one joint air accidentally entered and into the other none. Next day the patient had pain in one knee and not in the other, and the knee in which there was no pain was, the one into which air had accidentally entered. He now tapped immediately. He thought it good practice to tap early and relieve tension. He did not think the good result which had followed in Dr. Baynes' case was due to the carbolic acid and oil, which, in his opinion, formed a foreign body in the joint. Rest and pure air would give as good results.

Dr. BAYNES stated that it was carbolic acid and water, and not oil, that he had used.

Dr. HINGSTON said he was glad of the correction, as he had no objection to, but on the contrary, confidence in carbolic acid and water. Although he had seen the late Mr. Syme and Prof. Lister use carbolic acid and oil, he could not conceive how the compound was got rid of—not by absorption certainly.

Dr. REDDY suggested that the aspirator might be employed with benefit in cases where it was deemed necessary to tap the knee joint.

Dr. TRENHOLME asked Dr. Baynes how far he had succeeded in effecting union between the divided portions of the patella. Also, if Dr. B. had followed Prof. Lister's antiseptic method in dressing

the wound. While speaking upon the subject of antiseptic dressing he remarked that, when in Edinburgh last summer, Prof. Lister employed two assistants to throw carbolized spray over and around the wound as the dressings were being changed. This to him seemed going beyond what was necessary to obtain the benefits of carbolic dressings; as surely a granulating surface already carbolized should effectually check and destroy any chance germs that might alight upon its surface.

Dr. FENWICK mentioned that in the Hospital he had a patient who was struck on the outside of the knee joint with a tomahawk, and who was not doing well. Every precaution had been used to exclude air, but the joint was becoming ankylosed.

Dr. HINGSTON said he tapped in acute cases, before pus was formed. He of course endeavored, as far as was possible, to exclude air, but if it did get in, it did not produce the terrible mischief attributed to it. He tapped as soon as he was sure fluid was present, so as to relieve tension, a proceeding which gave great ease to the patient. In acute general arthritis tapping was not called for, and could only produce mischief, but as synovitis frequently led to general arthritis, he believed early tapping would frequently cut short the disease. In the cases where he had tapped, the relief was so marked that he was able to discontinue attendance on the fifth or sixth day, whereas previous to his adoption of this method of treatment, attendance extended to a much longer period. It was, of course, necessary to distinguish between synovitis and arthritis, but the history of the case, and the character of the pain, would suffice to distinguish them. He was glad to have heard Dr. Baynes very interesting paper, as it afforded an opportunity to take up generally the subject of inflamed joints, and their tolerance of air, with or without the favorite antiseptic.

Dr. FENWICK said that he had never tapped the knee-joint in synovitis, and yet his case did very well indeed.

Dr. BAYNES, in replying to the debate, said that the term antiseptic, which he had made use of, was not quite correct, for it was derived from the Greek, and meant "*against pus*." There was no mistake but that air entered the joint, for it was exposed during the whole time they were driving to his residence, eight miles from the scene of the accident, and back again, a period of fully two hours. The joint was well washed out with the carbolic acid lotion, and the hemorrhage was controlled by torsion. There was not any foot-piece to the splint that he employed, and

the foot inclined to fall to one side, so that he had it supported by pillows. The patient was able to sit up on the fourteenth day, and on the December following the accident he was walking quite firmly, although the limb was in a somewhat atrophied condition.

A vote of thanks having been passed to Dr. F. W. Campbell and Dr. Baynes for their papers, the meeting separated.

MEETING HELD DECEMBER 14TH, 1872.

Dr. R. PALMER HOWARD, President, in the chair.

Dr. PROUDFOOT was proposed as a member.

Dr. BESSEY then read the following paper on the hypodermic use of strychnia in a case of total blindness. He said:—

MR. PRESIDENT, AND GENTLEMEN:—

The case I have deemed of sufficient interest to bring before you, is that of a poor woman, who for the past four years has been afflicted with almost total blindness, but which happily I have succeeded, far beyond my most sanguine expectations, in relieving, by a tonic course of treatment, and especially hypodermic injections of a solution of strychnia. I have said *almost* total blindness because, although obliged to be led or to grope her way, yet still, when brought to me in August last, she was able to distinguish day from night, and could point out the situation of a window by the light appearance at the point of its situation, and by turning her eyes slightly downwards, she could discern obstacles before her, although their outlines were undefined.

I have used the word *amaurosis* in handing the name of this paper to our worthy Secretary; not because I wish the term thus used to be taken to signify a definite diagnosis of the case as such; more especially as *amaurosis* has come to be a very indefinite expression, which may be taken to mean any one of the numerous class of affections caused by, or depending upon, various lesions or degenerative changes occurring in the optic nerve, retina, choroid coat, or other deep-seated structures of the eye, not usually implicated in the formation of cataract, and often dependent upon diseased action in the nerve centres. The eye which I particularly desire to refer to in this communication is the right one, and which I have chosen to designate a case of *amaurotic blindness*; although, of course, the left will demand a share of attention, as the seat of an opacity which three months ago entirely obscured the vision.

Mrs. H. is a woman of spare habit of body, light

complexion, nervous temperament, aged 45 years. She has been twice married, and has been the mother of eight children, four of whom are now living. Her health has always been very good, but she complains of always having felt tired and exhausted from hard work, aggravated during her first husband's illness by want of rest. For many years previous to the failure of her sight, she complains of having suffered from severe pains in the head, referable to the vertex and frontal regions, with an occasional darting pain passing through to the occiput. These pains she calls neuralgia. She says her head has always felt too hot. Her habits have always been regular and temperate. She has never been addicted to the use of any narcotic, and there is not the least possible trace of syphilis in her history.

In 1864, her eye first became affected; it began with redness, which was attributed to "having taken cold in her eye." This redness increased, until, in a few days, the whole eye was covered with an ecchymosis, having the appearance of a blood clot; there was no pain or uneasiness felt in the eye at this time, nothing more than a slight intolerance of light. A market woman now advised her to put a lotion of *alum* into the eye, to remove the redness, which it did, but was followed in a few days by what she describes as "a most excruciating pain, of an aching character," which lasted many weeks. Her sight in that eye now began to grow gradually worse, and in a few weeks, to use her own expression, it was "stone blind." There was now frequent flashes of bright light; and upon closing the eye, the appearance of numerous stars, with other photopsies of a like character. Never more than one figure of a candle was visible at one time, and there was no circle or halo surrounding it, as is the case in Glaucoma. There was considerable neuralgic pain in the left half of the head, in the eye brow, temple, and ball of the eye especially; which latter I suppose to have been *ciliary neuralgia*. It continued in about the same condition for several months, when she was induced to apply to Dr. Thayer, who continued to treat her for several months without success. During this time two floating dark masses appeared in the eye, resembling black spiders, which, after a time, were lost in the dense darkness which settled over her eye. At this time the sight of the right eye was perfect, although she states that after the introduction of some kind of a lotion, by the person previously mentioned, she felt her sight impaired, but not to an extent sufficient to incommode her. She states that she next applied to Dr. Hingston for advice, hoping to secure the recovery of sight in her left eye,

now totally dark. That gentleman, however, she tells me, informed her that he could not render her any assistance. Her sight in the right eye continued very good, until the winter of 1868, when, on going to the window to arrange a curtain, the bright reflection of the sun upon the snow dazzled her sight so much that she turned away, and found to her great surprise that she was unable to see at all, exclaiming at the same time to her daughter, who was in the room, "Oh mercy, I am quite blind," whereupon the daughter was obliged to lead her to a seat. She states that she now remained "quite blind" for several weeks (having been blind in the left eye before), when she was persuaded to consult Dr. Smallwood, who, she states, applied blisters to the temples, behind the ears, upon the back of the arms, and gave her tonics. This so far succeeded in restoring her sight in the right eye, that she became able to read, sew, or do any thing she desired. Her sight now remained good for several weeks, but she continued to experience a pain of an aching character through the upper portion of the eye-ball. To remove this Dr. Smallwood gave her a lotion, which she put into the eye. The effect of this, however, was at once to impair the vision, and although she informed that gentleman of the circumstance, he encouraged her to persist in its use, which she did for a few days, but finally gave it up, as she felt she was rapidly losing the sight of the eye. Since then the eye has remained in a condition of almost total blindness up to the present autumn; a period of over 3 years. It may be well to mention here that presuming the lotion above mentioned to have been one of atropine, and also the one previously mentioned, as having been introduced into the eye by Dr. Thayer, to have been the same, then an explanation would be afforded for the circumstance of impairment of vision succeeding their use, for Soelberg Wells mentions that Von Graefe pointed out originally the fact that glaucomatous affections often succeed its use; and Dr. Derby, of Boston, records two cases of acute glaucoma following its instillation into the eye. He had also seen similar instances, which, he remarks, should warn us against the use of atropine unnecessarily and in this woman's case the use of atropine is followed by almost total blindness for about two hours. During the last period of blindness of the right eye, she states that she has been in the habit of discovering frequent flashes of light passing before the eye, and when closed she would frequently see a luminous circle of great brightness, interspersed with numerous brilliant stars. Sometimes she would see images of all kinds of strange

objects. This occurred chiefly at night, and made her very nervous, restless and sleepless. Upon close inquiry she tells me that while being led along the streets of the city she would sometimes fancy she could see the feet and legs, up to the knees, of persons passing by. She could not see anything at other times, and under other circumstances. She states that at one time since the failure of sight in the second eye, she consulted Dr. R. P. Howard, who examined her eyes and told her that, in the event of the right eye becoming totally blind, he would advise an operation upon the left. The very mention of an operation, to which by the way she had great aversion, she says so frightened her that she never returned to him, although shortly after the right eye did become quite blind. This is as much of the past history of the case as I have been able to gather. I will proceed to detail the case since it came under my care.

About the middle of last August she came to me, or rather was led to me by a child. I observed on her entering the door that she was quite blind, being entirely dependant upon the child for guidance, and keeping one hand extended to avoid striking anything that might be in her way. Her object in seeking medical advice was threefold: to obtain some improvement in her general health—which was much below par—to restore her appetite, which she states had entirely left her; and also in the hope of getting some remedy which would, to use her own expression, “do her some good, even if ever so little.” She was pale and anemic and complained of general weakness and loss of appetite. Her menses had not appeared for eight months, and there were other evidences of nervous prostration, such as a sense of faintness, shortness of breath, forgetfulness, langour, etc. A cursory examination of her eyes by the unaided vision, showed the presence of an opacity in the left eye, the true nature of which I could not well determine, but which I attributed to cataract; although it did not present the usual color and appearance to the naked eye, but was darker, duller, and apparently irregular, and appeared to be deficient on the inner edge, towards the inner canthus of the eye.

The right eye did not contain any opacity observable to the naked eye, but wore a peculiar vacant staring expression, and a somewhat hazy appearance. Both eyes seemed to be shrunken in their sockets and unusually dry.

The patient complained of this, and an absence of tears, dating from the time when severe pain was first felt in the eyeballs. There was also a very considerable degree of tension in both eyes, especially

the left. The right eye presented the usual appearances of amaurosis, which I was then disposed to consider the true nature of the case, depending, perhaps, upon debility of the optic nerve and retina, or atrophic changes of a degenerative nature in these tissues.

A casual glance at the countenance showed the eyebrows very strongly knit, the “corrugator supercillii” very much contracted, and the head thrown forward in an eager manner, when endeavouring to find an object before her, and when groping her way. I should have observed that there was some degree of photophobia complained of. There was also a slight roughness noticeable in the left cornea.

Treatment.—For the improvement of her general health I prescribed quinae sulphates gr. i. with tinct. ferri mur m. x. ter. in. die., and, as she expressed a strong desire to have something done for the amelioration, at least, of her then helpless condition of blindness, I proposed a trial of frequent hypodermic injections of strychnia in solution. The strength of this, to avoid unpleasant effects, I made much below that mentioned by Soelberg Wells (namely 1-40 to 1-20 of a grain). My solution contained $\frac{3}{4}$ of a grain of strychnia in eight ounces of water, of which I injected half a drachm, or 1-170th part of a grain, underneath the skin covering the Triceps Femoris Muscle, and repeated it every morning and evening. The susceptibility of the patient may be imagined when I state that the hypodermic injection of this small dose was followed in about ten minutes by uncontrollable twitchings and jerking of muscles of the fingers and slight contractions of those of the left hand; winking of the eyelids of the same side. These soon passed away, and never appeared again. She now continued to visit me morning and evening, and I injected each time into the arm half a drachm of the solution of strychnia before mentioned, each containing 1-170th of a grain of strychnia. From these injections she felt no inconvenience not even the slight twitchings before mentioned as having followed the first administration. On each occasion I selected a new site for the introduction of the needle, and by observing this precaution, and changing the arm frequently, no great local tenderness or inconvenience was experienced. During the first three days no perceptible change was noticed, but on the fifth day she claimed to be able to distinguish houses as she passed along the streets, and upon the sixth day she said she could read on her way to my office, a large sign in Wellington street, bearing the name of Logan, and to be able to see the passers by. The eyes were now much brighter (having lost their dull, listless stare) and were

more moist. She now continued to improve under the daily continuance of the treatment (Sundays excepted when no injections were administered) until on the 15th day she claimed to have read the letters "Open on Sunday, &c.," upon the door post of a Drug Store in McGill street. These letters are about one inch in size, and are white, painted upon a black ground. She could also spell signs at the distance of sixty or eighty feet letters about one foot in size. Encouraged by this degree of improvement, I went on using the hypodermic injections, but, on the principle that if a little would do good, more would do better, I doubled the dose, and for a few times injected a drachm of the solution containing 1-85th of a grain. This seemed to produce a greater dullness of sight, and I again returned to the small doses, resolved to wait for a gradual improvement rather than to hurry matters. Her sight now continued to improve until, on the 25th day, she expressed herself much delighted at being able to make out with greater clearness the signs of the shops as she came along the street. She had also for the first time on the day previous recognized the green shutters upon her neighbor's window, and could tell whether they were open or shut. She could also distinguish household articles as chairs, books, etc.

I now tested the correctness of her statements by asking her to spell words which I had at hand, printed in large type, such as newspaper headings, advertisements, etc., and by which I observed that type of about $\frac{1}{4}$ inch in size could be read with ease. She could readily make out No. 20 of Jæger's test types, and could spell No. 19 of the same set, and type of the same size and description. I may here premise that when I adopted this mode of treatment I did so without the expectation of being able to do more than ameliorate her pitiable condition by improving her general health, and possibly to some extent, her vision in the right eye. This I hoped to do by restoring tone to the optic nerve and retina; and relieving her debilitated condition, upon which, I deemed it quite within the range of possibility, her defective vision might, in some considerable degree depend.

However, the expectation of being able to accomplish anything of much consequence in the improvement of her condition was, at first, so slight, that for some time I took no detailed notes of the case, and have been obliged, thus far, to quote largely from memory.

The favorable results already attained on the twenty-fifth day of treatment encouraged me to hope

for a continued improvement and possible permanent restoration of sight in the right eye, and before going on with the treatment I resolved to make out the true nature of the case, by an ophthalmoscopic examination. My first attempt was, at first, somewhat negative. I could settle the nature of the difficulty with the left eye, which I distinguished as lenticular opacity, most dense at the centre. The right eye appeared to contain a smoky or misty cloud, or opacity, which seemed to be very deeply seated, it might be in the vitreous humour, or the hyaloid membrane, I could not decide which. I could not make out the retinal vessels; or, as it appeared, get a clear view of the retina at all. The pupil was very undilatable; in fact, its smallness has always been characteristic. Wishing to make out a satisfactory diagnosis, I requested Dr. Hingston, who had been her former attendant, and who might be presumed to be well acquainted with the history of the case, to join me in using the ophthalmoscope. The pupil would not dilate much under a four grain solution of atropine, but became distorted into an irregular ragged shape, showing strong adhesions of the iris. The opacity in the left eye we concluded to be capsulo-lenticular cataract, but the character and situation of the opacity in the right eye was not determined, Dr. H. supposing it to be situated in the hyaloid membrane. It effectually obstructed the view of the retina. On this occasion, previous to using the atropine, she could read type of a quarter of an inch in size. I resumed the treatment, and continued the injections until the sixth week, once a day for the last few days. Her sight continued slowly but steadily to improve. The weather now became inclement, and she ceased to pay her regular visits to my office, but continued the use of her quinine and iron daily. It is now over two months since the hypodermic injections were discontinued; during which time, however, she has continued the use of the tonic. Her general health has greatly improved, her menses, which were suppressed, have returned; and she boasts of a vigorous appetite.

Before proceeding with the use of the hypodermic injections, which I intend to continue for a few weeks to give her all the benefit possible from their use, I again tested her powers of vision on Friday, December 6th, with and without the aid of lenses, and also by artificial light. Her judgment of colours I found to be perfect, and she was able to read No. 15 of Jæger's test types, and to make out No. 14 of the same; while with the assistance of a pair of nine inch focus periscopic lenses,* she could make out without hesitation No. 12 of the same set of type.

I now submitted her to another examination with the ophthalmoscope. This time, also, in company with Dr. Hingston, and in the presence of two other medical gentlemen, who happened to be present, and before whom she displayed her ability to read the types above mentioned. The pupil is still but imperfectly dilatable, becoming distorted and ragged under atropine. The opacity in the left eye appears to be diminished around the edges, and by holding a hand a little to the left and in front of the eye, she could then make out the number of fingers extended. The relative size of the opacity allows a considerable quantity of light to enter the eye, and she can, by looking in certain directions, recognise the presence of objects. This eye has, otherwise, a very healthy appearance, and is free from pain. The right eye now contains no opacity. The cloud of a smoky colour no more intercepts the vision, and, although the iris remains undilatable in this eye also, the retina can now be brought into full view, the different *media* of the eye appearing quite clear. The retina, or so much of it as can be seen, has a very pale and anemic appearance, and is marked by three pigmentary deposits. The optic disc can be made out with some difficulty, but not in its free circumference. There is also, an apparent slight depression near the optic papilla.

The foregoing is a hasty *resumé* of the case up to the present time, when the sight in the right eye may fairly be claimed to be in a great measure restored. The sight, however, is not so good but that it admits very much farther improvement; and, with that end in view, I purpose a continuance, at intervals of a month or two at a time, of the hypodermic injections.

Dr. F. W. CAMPBELL said that in the October number of the *American Journal of the Medical Sciences* there was a very interesting paper on the employment of strychnia in ophthalmic diseases, from the pen of Dr. Chisholm, of the Baltimore Eye and Ear Institute. Dr. Chisholm began with the 1-60th of a grain, slowly increasing till the 1-30th was reached, but only injected a small quantity of fluid,—say, about three minims. It had been found useful in hemeralopia, muscular asthenopia, amblyopia, tobacco amaurosis, progressive nerve atrophy; and one case of acute glaucoma, in which prompt relief followed its use, had come to the knowledge of Dr. Chisholm.

Dr. TRENHOLME said no reference had been made in the paper to the degree of tension in the eye at the beginning of the treatment.

The PRESIDENT concurred in this remark, and requested Dr. Bessey to state what condition he found the eyes in, in that respect.

Dr. BESSEY observed that the tension in both eyes was increased, and greater in the left than in the right; the former contained the cataract. Both were retracted, or, as it were, shrunk deeper in the sockets. These conditions gradually seemed to disappear as the treatment went on.

Dr. HINGSTON remarked that as Dr. Bessey had referred to him among others, he would state he barely remembered the woman's case. She had, it is true, been an old patient of his, and he remembered her applying to him some years since for advice respecting the eye containing the cataract, for which he could afford her no relief, seeing there was anterior synechia. The other eye was then in good condition. The case was one of considerable interest to him, from its history. Dr. Bessey had asked him to join him in making an examination with the ophthalmoscope. At first the opacity in the right eye, wherever seated, quite prevented a view of the retina. He considered its situation to be the hyaloid membrane. The adhesions of the iris were such as to prevent dilatation. The last time he had examined the eye with Dr. Bessey he found this opacity entirely gone. The retina was quite pale and anemic; indeed, he had never seen a retina so pale. A very interesting point in the case was, the important practical fact that she was once blind but now she could see.

[The patient was now brought into the room and a copy of Jæger's test types put into her hands, of which she proved herself able to read readily and correctly No. 15.]

Dr. BESSEY stated that the previous week, before using atropine with a view to an examination of the eye with the ophthalmoscope, she had read No. 14 of Jæger's types, and with some little hesitation could spell No. 12. But since then she complained that her eyesight had not been quite *so clear*. This, however, was only temporary, and was always the effect of atropine when introduced into her eyes.

[Her eyes were then subjected to an ophthalmoscopic examination by the members present. Dr. Bessey remarked that as the pupil was but slightly influenced by the action of atropine, he had not, at the patient's solicitation, introduced any before bringing the patient before the meeting.]

Dr. BULL enquired whether the introduction of atropine affected her vision as regarded large objects—as houses, etc.,—or only affected her power of accommodation in reading. [She replied she could not see large objects as well after as before atropine was

* A pair of Messrs. Lazarus, Morris & Co's. perfected lenses.

put in her eye, and could not see anything small at all for a few hours. Her sight was always much weakened by it. When its effects began to pass off she could see first, large objects clearly, and not until 6 or 7 days could she see to read as well as before.]

The PRESIDENT remarked (in effect as follows), that the case was one of much practical interest, yet it was wanting in certain features in a diagnostic point of view. The true state of the deep structure of the eye could not be made out until recently from an opacity which interposed, and which Dr. Hingston had thought was seated in the hyaloid membrane, probably due to a thickening or want of clearness of the membrane. They had the patient brought before them, and could examine the case for themselves. It was clear that whereas she had been blind now she could see, which in itself was a fact of great practical moment. It was, however, a matter to be considered how much the patient's previous state of bad health, which had been much below par, had had to do with her blindness, and also, how much the iron, and quinine, and nourishing diet had to do with her restoration to sight, and whether the author of the paper was not wrong in attributing entirely to the hypodermic injections of strychnia the great share of the success which had attended the treatment. He was not prepared to say how strychnia acted in these cases,—such as amblyopia, ramaurosis, etc. It was as difficult to explain as how the calomel sometimes acted. Still it was another evidence of march of progress in the science of therapeutics. Many drugs were daily being discovered to possess therapeutic actions which had not before been ascribed to them. He had observed that, of all the writers who had used strychnia in eye affections, that it was purely upon empirical grounds. No adequate explanation had been offered of its *modus operandi*. It was a very interesting fact in therapeutics that strychnia injected under the skin should have so much more beneficial an effect, than when taken by the mouth, and this led him to cherish the hope that there were many diseases, whose treatment was now unsatisfactory, which would eventually become amenable to treatment. It was still a matter of conjecture what particular forms of disease it might prove most useful in.

Dr. BULL stated that he had seen, while attending the New York Hospitals, the employment of this method of treating eye affections by the hypodermic injection of strychnia. It was used in all forms of eye diseases, but he could not say that he had seen very much benefit from it.

A vote of thanks having been proposed and passed

unanimously, Dr. Campbell introduced as the next business before the meeting a report of the Committee upon Medical fees. This, however, after having been read, was, on motion, allowed to lay on the table, to come up for discussion at a future meeting.

Medical Items and News.

CONSTIPATION.

Professor Samuel J. G. Armor, M.D. (*American Practitioner*), in a conversation with his friend, Dr. J. H. Baxter, of the United States Army, was informed that the extract of stramonium is beneficial in cases of constipation.

Prof. Armor has been in the habit of using belladonna in the form of suppository, in constipation; but following the suggestion of Dr. Baxter, tried the extract of stramonium in the same way, and is pleased with the results. It possesses in his judgment, valuable alterative properties, which commend its use in many cases of constipation, independently of its action on the bowels. Half or three parts of a grain of extract of stramonium may be combined with sufficient quantity of cocoa butter, made into suppository, and used by the patient each night on going to bed. It is admirably adapted in this form to obstinate constipation of nervous females, who suffer at the same time from pelvic irritations from various causes.

It quiets irritation of the uterus and bladder, calms and sothes the nervous system, allays irritative actions generally, and permits the patient to sleep.

To give permanency, however, to its effects, its use may be accompanied or followed by small doses of nuxvomica, or a dinner pill composed of aloes and nux vomica. Universal and permanent tonic action of the paralyzed muscles of organic life is secured, and the morbid condition of the intestinal glands at the same time corrected.

TREATMENT OF ASTHMA.

BY J. HALE, M.D., OF GWENSBOROUGH, KENTUCKY.

This prescription is particularly recommended in cases of asthma, by Dr. Hale: R Ether, sulph. $\frac{1}{2}$ iss; tr. lobeliae, 3 j; tr. opii, tr. stramonii, aa. $\frac{1}{2}$ iv. M. S. Teaspoonful every hour or two until the dyspnoea is relieved.

MARRIED.

At Gentilly, on the 25th of November, by Reverend Mr. Dostie, Parish Priest, J. E. A. Lanouette Esq., M.D., C.M., to Camilla, eldest daughter of B. Maurauld, Esq., N.P.

DIED.

At Toronto, on the 26th November, Edward Quincy Sewell, Esq., M.D., aged 62.

Original Communications.

CASE OF MELANOSIS OF THE EYE BALL.

By RICHARD A. KENNEDY, M.D., C.M., Professor of Anatomy;
University of Bishops College.

(Read before the Medico Chirurgical Society of Montreal,
January 25, 1873.)

Mr. G., 56 years of age; very tall; of spare habit of body; top of head bald, the hair remaining being nearly white, and having lost all his teeth, looks to be much older than what he really is.

I was consulted by him in the month of August last, being requested to examine his left eye, which presented the following appearance: The conjunctiva was of a yellowish tint, traversed in all directions by enlarged blood vessels. The eyeball was slightly enlarged, and its tension increased. At the upper and inner angle of the orbit, about a quarter of an inch from the cornea, there was a slight bulging, as if the contents of the eyeball were escaping at that point. The cornea was clear and transparent, but seemed to be flattened. Iris widely dilated and pushed forward by the lens, which latter was resting against the cornea, being opaque and presenting a yellowish flocculent appearance. There was no pain in the eyeball, which could be freely pressed upon; but at times he suffered from great supra-orbital neuralgia. The diagnosis was intraocular tumor, but of what nature I was unable to determine. From the bulging and increased tension it was evident that the eyeball would soon burst, and I advised its immediate removal. He wished me to try the effect of medicine, as he very much dreaded the operation. I explained how useless that would be, and the danger of delay, and urged its immediate removal; but as it did not trouble him much, he said he would wait until cooler weather. I did not see him again for some time. As he subsequently came under treatment, it will be better that I should now give the previous history, quoting his own words:—

"I was born with different colored eyes, a black and a blue one; the left being the black one. There was no defect in the sight of either, and I used them, perhaps, excessively, until ten years ago, when I noticed them getting weaker. About this time I was attacked with neuralgia, which commenced in my right cheek, near the top. I thought it was toothache at first, as it loosened two teeth which, after a short time, fell out without pain, and not at all decayed. Soon after the neuralgia returned, and took out one or two more teeth; this was repeated until, at the end of about three years, it had gone

regularly round both jaws and taken every tooth out, not one of them being decayed. The neuralgia then mounted to the head, and the pain began to run from the left eye back to the crown. About this time, that is seven years ago, I noticed an inability to see clearly on the streets from the left side of my left eye. I was then wearing glasses, and called to ask the optician if there was anything wrong with them. He told me to see a physician, and Dr. Campbell, whom I consulted, at once said I had cataract, and advised me to cease working at my profession as an accountant, for a while, and call upon him again when it was entirely covered. Long before that occurred, it became intensely painful and inflamed, and the neuralgic pain became frightful. I called again on Dr. C., who examined the eye with the ophthalmoscope, and said that I had ophthalmia as well as cataract. At the same time, on account of the advanced state of the cataract, he could not do anything more until it was still further developed. He therefore merely prescribed a lotion to relieve the pain. From that time, over six years ago, until this summer, I have been in more or less pain all the time, having exacerbations every ten days or a fortnight. I would take a dose of some medicine, such as salts, which made the pain worse for a day or two and then better for a week, getting gradually worse within a fortnight again. But, during all this time, it was no doubt getting radically worse. At last, in July of this year, I found it unbearable. Dr. Campbell being absent I was referred to Dr. Howard, who said it must come out, but advised me to wait until Dr. Campbell returned; as it had gone so far it might be delayed until cooler weather."

As I have stated, he called upon me in August last. I did not see him again professionally until the 16th of October, when I was sent for. He had been working the day previous in his garden, and passed the evening in company with some friends at his house, and, to use his own words, "Had been more free from pain that night and for some time previous, than for several years, nor had I provoked a sudden attack by any indiscretion that I know of." In fact, he congratulated himself on going to bed, that the eye would bother him no more. Shortly after retiring he was seized with a violent pain in the eye, but, supposing it to be a return of the neuralgia, did not get up, but bore it as patiently as he could till morning; it was then discovered to be much inflamed. I saw him during the forenoon. The conjunctiva was acutely inflamed, the inflammation seeming to implicate the subconjunctival tissues; the eyelids were greatly swollen by œdema

and there was intense supra-orbital neuralgia. The treatment consisted in the constant application of fomentations; a two-grain solution of atropine, twice a day, dropped in'o the eye; and to relieve the neuralgia, a liniment of aconite and chloroform to the head. The bowels were fully operated on by magnes. sulph., and a draught of chloral hydrat at bed time, to be repeated if necessary.

Oct. 17th.—Neuralgic pain much lessened; conjunctiva swollen and very vascular, and a strip of it protruding between the edges of the lids; this strip I freely scarified, and encouraged the bleeding, which gave great relief.

Oct. 18th.—Œdema of lids decreasing; supra-orbital pain is slight; still considerable chemosis of conjunctiva, which was again scarified; discharges but little pus. Ordered argent nit. gr. ii. ad aquæ 3 i., to be dropped into the eye every four hours, and cold water compresses to the lids. From this date he continued to improve, and on

Oct. 22nd.—I found the œdema was much lessened. Chemosis of conjunctiva still great; slight discharge and not much pain. The conjunctiva was brushed over with a gr. xx sol. of argenti nitras., and an astringent lotion of zinci sulph. grs. ii., alum grs. iv, aq. distill. 3 i., directed to be applied every four hours. To continue the cold compresses, and internally a mixture of the citrate of iron and quinine.

He continued to improve, the conjunctiva became less vascular, and the œdema of the lids greatly lessened, so that on the 2nd of November I was able to fully draw upwards the upper lid, and, on doing so, discovered, at the upper and inner angle of the orbit, a small discolored tumor, as if the contents of the eyeball were about escaping at that point. As the conjunctiva was very thin over it, I advised immediate removal of the eyeball, and the following Monday was fixed upon for the operation.

Nov. 4, 2 p.m.—Assisted by Drs. F. W. Campbell, Trenholme and Perrigo, I removed the eyeball. The patient was placed on a couch, and chloroform given; during its administration he was boisterous, and there was considerable muscular spasm continuing for some time. It was thought best not to use a tep speculum on account of the tumor, the eyelids being drawn apart by retractors. The conjunctiva, which was still much swollen, being divided around the cornea, and including that portion which covered the tumor at the upper and inner angle, which necessarily made an irregular opening in that membrane. The tendons of the recti were then caught up by a strabismus hook and divided. The globe was then

turned so that the superior and inferior oblique were divided; it was then lifted out, and the optic nerve separated by blunt pointed scissors. This latter part was performed somewhat hurriedly, as we did not think it proper to continue the chloroform, serious symptoms presenting themselves. Very little hemorrhage ensued. A plug of soft sponge was placed in the wound and the lids closed over it, a wet compress applied over them, and a bandage drawn over both eyes. After the chloroform had passed off, and as the pulse was still weak, I gave about an ounce of brandy and got him into bed. I saw him again at eight p.m. Very little pain, pulse normal; did not disturb the dressing. To get pulv. opii gr. i, and repeat in four hours should there be much pain.

Nov. 5th, a.m.—Did not sleep during the night; but little pain; pulse normal. Bandages were removed, and the plug drawn out, which gave great pain at the time, but this soon subsided. Compress and bandage re-applied.

3 p.m., same day. Eyelids slightly œdematous; complains of slight pain; otherwise doing well. Syringed out socket with luke-warm water.

Nov. 6th.—Lids greatly œdematous and slightly discolored. Complaints of much pain and discharging a serous fluid. To be syringed out often with a weak solution of carbolic acid; continue cold compresses; and to take pulv. opii gr. i, every four hours,

Nov. 7th.—Found him sitting up in bed. Œdema lessened; but little pain, and slight discharge. Omit opium and continue the other treatment. From this date he continued to improve; and, on the 10th, the œdema was gone, wound looking healthy, discharges more freely, no pain, appetite good. He continued to improve, but owing to the irregular opening in the conjunctiva, the final closure took longer than usual, a small button of granulations requiring to be snipped off twice. He is now entirely free of pain; the conjunctiva is regaining its healthy appearance; will have a good stump for an artificial eye, the muscles acting freely in all directions; and the right eye is stronger in sight than it has been for some time. Health good, and can attend to personal matters.

On examining the eyeball I found intimate adhesions between the sclerotic and tendons of the recti closer than in the normal condition. The optic nerve, in appearance, was healthy, the disease not having extended to it.

On cutting into the eye, found it filled with a soft black substance, having filamentous bands running through it. By the microscope, there was a large amount of granular and pigmentary matter; cells

resembling blood corpuscles, but larger and containing nuclei; and cancer cells, mostly fusiform in shape. From this, I considered it to be a melanotic cancer, involving the whole of the eyeball. Probably the disease commenced as sarcoma of the choroid, taking into account the length of time intervening between the first eye symptoms and the excision of the eye.

That the disease had commenced on the choroid I infer from its melanotic character, depending upon pigmentary granular deposits of an intensely black color, called melanin; which appears to be merely altered haemotoidin becoming endowed with greater power of resistance than freshly formed haemotoidin, so as to undergo no further change.

In itself this is not an important form of degeneration, and must be looked upon as the result of those conditions upon which the formation of pigment depends, than as in any way due to the presence of pigment itself. Pigmentary degeneration being described as consisting of "an abnormal formation of pigment in the tissue, derived from coloring matter of the blood." In the case before us, it no doubt, was owing to the selective power of the cells of the choroid separating the coloring matter from the blood. For it has been generally observed that growths originating in tissue normally containing pigment, are most frequently melanotic in their character.

Two forms of malignant growth are most frequently met with in the choroid. 1st. Sarcoma; 2nd. Carcinoma, there being two chief varieties of the latter—medullary and melanotic. Sarcoma and cancer may co-exist, forming a mixed tumor containing a large amount of pigment, which is then termed melanotic sarcoma, and which is the most frequent form of intraocular tumor. Both forms are equally malignant, though, in point of time, cancer is most rapid. Sarcoma, so long as it is confined by the sclerotic, being generally slow. What connection the previous neuralgia and the shedding of the teeth may have had to do with the disease in the eye, I am unable to explain, as I find no mention of such effect occurring previous to, or in connection with intraocular tumors. It may be merely coincidental, but it is remarkable that the teeth should all be lost in so short a time, and followed immediately after by the eye symptoms. The fact of the eyes being of different colors, and that it was the black one which became diseased, is noticeable as a tendency in that eye to an increased formation of pigment, may have determined the melanotic character of the tumor. After the loss of the teeth the neuralgia left the fa-

for the head, at the same time there was loss of vision on the "left side of the left eye," so that he could see only half the light when looking at a lamp. As we know that the image of an object is inverted within the eye, the disease must have commenced on the inner side of the eye; the retina becoming detached and pushed forward at that point, so as to have its function impaired or lost. This was confirmed by the tumor perforating the sclerotic at the upper and inner angle of the orbit, near the cornea, at which point the sclerotic, being thinner, would offer the least resistance. That the tumor was not discovered when the eye was examined by the ophthalmoscope, no doubt was owing to the obscuration of light by the cataractous condition of the lens. In other respects, since that time, the symptoms, as described by himself, were those following the growth of an intraocular tumor: the formation of a cataract, and its yellowish flocculent appearance, the intense neuralgia of that side of the head, &c. That it partook, latterly, of the nature of true cancer, I judge from its softness and the character of its cells; but, that it was also sarcomatous I infer from its slow growth and the existence of round corpuscles containing nuclei characteristic of sarcoma.

A CASE OF OBSTRUCTION OF THE DUCTUS COMMUNIS CHOLEDOCHUS, BY MALIGNANT GROWTH.

By E. H. Trenholme, M.A., M.D., Professor of Midwifery and Diseases of Women and Children, University of Bishop's College, Fellow of the London Obstetrical Society, &c., &c.

The subject of this paper, F. B., aged 68, and a native of Ireland, was a tall, well-formed, active and intelligent man. He was a plasterer, and had always enjoyed remarkably good health till within the last six or eight months of his life. On 7th November, 1872, I was called to see him, and found that he had been ill three or four days, with a pain at the pit of his stomach and general debility. He knows no cause for this attack, as he has been in better flesh and strength the last few weeks than for some time previous. There is nothing particularly noticeable about the appearance or condition of the patient, except slight pains of a persistent character, at the pit of the stomach, and loss of appetite. I ordered turpentine stupes to seat of pain, and gave tr. nuxvomica, internally. The bowels were regular, but the urine rather high-colored. During the following two days pains at pit of stomach more severe, appetite worse, more debility, urine deeper tint, pulse weak and rapid, tongue furred, and symptoms of

jaundice beginning to appear. Upon examining the abdomen, a large tumor was felt chiefly in right lumbar and hypogastric regions, which, by palpation, was recognized as enlargement of the liver and gall bladder. The stools were scanty and clay-colored; urine of very dark hue and loaded with bile pigment and biliary acids (Pettenkoff's test); the patient refused food on account of nausea and pain at the pit of the stomach.

Nov. 10.—The above symptoms, &c., were aggravated, and, in addition, there was exquisite tenderness over a small tumor lying a little to the right of the umbilicus. There was a good deal of fever; harsh dry skin. From these symptoms it was evidently a case of jaundice from obstruction of the gall duct, in all probability due to malignant tumor. The hot fomentations were continued, and aconite substituted for the nux vomica. This condition of affairs continued, with slight variations, up to the 22nd of November, when Dr. Sutherland saw the case in consultation with me. The history of the present state of the patient having been discussed, the only point undetermined was, whether the gall duct was occluded by the result of inflammatory action or malignant tumor. Although there were no indications of inflammation it was deemed wise to adopt a line of treatment suitable for this form of occlusion of the duct; he was placed upon alkalies and teraxicum. He was ordered nourishing diet, and the external application of an iod. of mercury ointment. This treatment was continued for several days without the slightest benefit; in fact, the skin became more deeply colored, and the urine more scanty, and high colored also. The pains at the pit of the stomach were more severe, and he refused to take more medicine. I may remark that, for some days past, there has been a great drowsiness, the patient sleeping the greater part of the time.

26th.—Patient very weak and rapidly losing flesh; urine still scanty; considerable fever, stools clay-colored as usual, and abdominal dullness of the tumor increased, also greater pain at the pit of the stomach. I prevailed upon the patient to take digitalis, and continue the abdominal application.

29th.—Patient easier; dulness of abdominal tumor and tenderness less marked; stools more natural color; urine more free and lighter color; skin not so dark.

Dec. 2nd.—Feels better to-day; not much pain; pulse full and less rapid; is able to take a larger quantity of food, but complains of utter prostration of his strength, and cannot move himself in his bed.

He passed the day comfortably, but suddenly died at 6 p.m.

On the following day—twenty hours after death—assisted by my friend, Dr. Kennedy, I made a "post mortem" examination. As the abdominal tumor was the point of interest, we removed the liver, the head of the pancreas, and a few inches of the duodenum. The liver was much enlarged and weighed about twelve pounds; its substance was friable, granular, and darker than normal; the gall bladder, the gall duct, the hepatic duct, and the ductus communis choledochus, were greatly distended. The gall bladder contained about sixteen ounces of pale straw-colored fluid, and its walls were thin and semi-diaphanous. The hepatic duct was distended with the same fluid to the diameter of one inch, and the gall duct to about three-fourths of an inch. The common duct was but slightly dilated at its commencement, and not at all at its termination. Under the common duct, and in the head of the pancreas and adjacent tissue, there was a hard tumor, about the size of an egg, which pressed upon the walls of the duct and prevented the escape of the bile. The duct itself was pervious, as you see by the specimen now passed round for inspection. The malignant nature of the growth was demonstrated by placing a section under the microscope. There are one or two features in this case which are worthy of notice. 1st. The previous good health of the patient, who was, in fact, in better flesh when taken ill than he had been for years. 2nd. The absence of such severe pains as would naturally be expected in malignant growths. 3rd. The escape of the contents (in part) of the common duct, two days before his death. This fact was recognized by the diminution of the central part of the tumor of the abdomen, and a return of the natural color of the fæces. This anomaly was, in all probability, due to the absorption of the adipose tissue between the duct and tumor, and also in the neighboring structures, by means of which the pressure was so far removed as to allow of the escape of some of the contents of the gall bladder.

Montreal, Victoria Square,

December, 1872.

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Case occurring in Practice. Charbon. By WOLFRED NELSON, C.M., M.D., Bishop's Coll.

Joseph C——, employed by the Montreal Warehousing Company, called to consult me, on Friday, October 18th, stating that he had a very sore arm,

that necessitated his leaving his occupation, that of shovelling grain in the Company's buildings.

Previous History.—Up to time of present illness, had enjoyed perfect health. While at work on Tuesday, felt considerable itching on left arm, a few inches above the wrist; supposed that he had been bitten by a fly, (slaughter house in vicinity); the little red point, from frequent irritation caused by scratching, increased in size, and continued to trouble him all day. A vesicle then formed; and the arm next morning commenced swelling. To prevent the inflammation from extending upwards, he firmly tied a handkerchief about three inches below the elbow, and two inches above the vesicle. He still kept at work, although suffering considerably; passed a sleepless night, and consulted me on Friday morning.

The vesicle was about the size of a ten cent piece, well marked and umbilicated, with a very dark centre, surrounded by a halo of angry inflammation. Tongue furred; pulse 90; bowels costive. The inflammation extending to the deep tissues of the arm; swelling considerable, this, however, at the time, did not extend beyond the ligature he had placed below the elbow. Although rather late, I thought it well to puncture the vesicle in several places, when a serous fluid escaped that darkened the point of the bistoury used, and apply nitric acid. Gave patient two pil. cath. co., and prescribed the following:—

R. Quinæ sulph., ʒj.; ferri perchlor., q. s.; aquæ ad., ʒviii.

Sig. Coch. mag. ter in die ante cibum.

I directed the man to return to his boarding-house and apply poultices—fresh ones every few hours. Pain very severe; sleep procured by using chloral, as follows:—R. Chloral. hydrat. ʒj.; Aqua aurant. syr. simplex., ʒj. āā.

Sig. Take a fourth part when required.

The chloral acted very well, and was not attended by nausea; it was also taken in smaller doses during the day, and allayed the pain considerably. Saturday.—Swelling increasing; arm very painful; shooting pains running from the shoulder down to tips of fingers; hand increased in size; pills have acted freely; patient very anxious. After removing his ligature, the inflammation gradually crept up the arm; axillary region very sensitive; pulse ninety-four and hard; increased temperature of left arm well marked; appetite indifferent; uses tonic regularly.

Sunday.—Patient worse; high fever; pulse 100, hard; was slightly delirious through the night; per-

sistent elevation of temperature of left arm; appetite poor; uses poultices as directed. Inflammation still extending; line where ligature was applied not so well marked; complains of great pain; ordered full diet and stimulants in moderation; hand dark and congested, skin on dorsal surface presenting an ecchymotic appearance; fever higher; pulse 106; bowels regular, urinates freely; requires larger doses of chloral to procure sleep; tongue cleaner. The severe symptoms in this case lasted some fourteen days. At night the patient was frequently slightly delirious, possibly due to the chloral. Poultices were kept up for thirteen days, of the three kinds used, viz.: linseed meal, bread and milk, and carrots grated; the latter I think acted more satisfactorily than the former.

After the eighth day the inflammation ceased to spread; he at this time described the pain in the palm of the hand as lancinating, with a feeling that the hand would burst: no pus, parts œdematous, pitting deeply on pressure; fingers apart, due to swelling. The pulse during this period remained high, varying from 94 to 110. After the ninth day the slough commenced to separate, and came away at the fourteenth day, leaving a deep pit, fully as large as a full-grown filbert. Pain gone; swelling rapidly subsiding; can flex fingers; skin of hand peeling off; pulse 88; sleeps and eats well; tongue clean; bowels regular. Sore treated with a weak solution of carbolic acid, one to sixty; edges brought together by compresses. The granulating process was extremely slow; the skin surrounding the sore presenting a hard raised edge, showing little disposition to heal. By the twenty-seventh day it had nearly closed; when patient would return to his work. The healing process went on favorably, and the patient had no further trouble.

The solution of chloral used was made according to the Paris recipe—the orange flower water and simple syrup cover its pungent taste, and causes less of a burning feeling in the fauces than the simply aqueous solution. Much of the nausea and alarming symptoms caused by using chloral, have been due to an impure article being employed. In other cases it has not been fairly tried. The solution, if carefully prepared and kept well stopped, will remain good for two and three months. Under no circumstances should a solution be used that has a strong odor of chlorine. It has acted like a charm in two cases in my practice, of incipient delirium tremens, one of severe pleurodynia, one of puerperal mania, and in hysterical excitement. Many patients cannot take it.

Two years and a half in a London General Hospital. By G. F. SLACK, member of the Royal College of Surgeons, London, late House Surgeon Charing Cross Hospital.

(Number two.)

I think that Dr. Sayre is perfectly correct in his opinion that disease of the hip joint always originates from injury, and that strong healthy children are quite as liable to this affection as those that are of a weak scrofulous constitution. I have never failed to find a history of an injury of some kind, either a fall or a run over or a sprain, happening it may be a few months before, or several years may have passed by with the symptoms gradually becoming more distinct. Of course a very slight injury will set up the disease in a scrofulous child, and the disease will in such a case be more likely to run its course in spite of any treatment, and as a last resort the joint is excised. As such cases generally occur among the poor, they are usually taken to a Hospital for operation, which to a certain extent accounts for so many scrofulous children suffering from hip-joint disease, being found in Hospital, whereas, there are a great many strong healthy children suffering from this disease who never find their way into Hospital, from the fact that such cases are much more amenable to treatment, rest in bed alone often working a cure, or that they are the children of parents who can afford to have them treated at home, so that accounts of such cases are seldom recorded. As statistics about hip-joint disease have been chiefly taken from cases treated in Hospital, I think if a record of all the cases of hip-joint disease treated in private practice, had been kept, the results of such cases would be shewn to be much more satisfactory than of those that have been treated in Hospital, although a Hospital has so many advantages for such cases. If such be the case, attributing all cases of hip-joint disease to a scrofulous condition of blood would be wrong. The same applies to disease of knee-joint, ankle, &c., with this difference, that the symptoms of hip-joint disease are more obscure, less likely to attract attention, and consequently do not receive as early treatment as affections of other joints more easily examined and treated.

The progress of hip-joint disease is usually so slow, the symptoms so obscure, that it is difficult in many cases to fix the time of origin of the disease; especially if the patient be young, and the parents ignorant and stupid; or to connect that origin with an injury. In the knee, shoulder or ankle it is much easier to obtain a true history, as the symptoms

are more marked and run a more rapid course. In cases of joint disease, especially of the hip, occurring in children of a decidedly scrofulous constitution, I think that any hope of doing permanent good to the patient by excising the joints is almost out of the question. There remains a choice between two plans, either to let the disease run its course, simply stimulating and feeding the patient as much as possible, &c., or to amputate. The latter, I believe to be the only hope in such cases. Quite recently one or two cases of amputation at the hip-joint have been performed in children, where the hip-joint had been previously excised without effecting a cure. A rapid recovery was the result, and I think that instead of letting so many children, and such very intelligent children as these cases usually are, lie day after day dying by inches, amputation ought to be performed in many cases. The following case would be a good example:

A child about ten years of age, who had been suffering from hip-joint disease in its various stages for more than five years, was placed upon the table for operation. In attempting to throw out the head of the bone, the femur broke in two places at the junction of the upper and middle and of the middle and lower thirds, there being a mere shell of bone. The head of the femur was carefully removed, an interrupted Liston was applied, and for six weeks the case went on rapidly improving; the femur united firmly and the child's health improved very much. Here, however, the process of reparation came to a standstill; a slight discharge continued from the hip, gradually increasing; the belly became swollen, and the skin dry and waxy looking; in fact all those unfavorable symptoms, which are only too familiar to any one who has the care of cases of hip-joint disease. Had amputation at the hip been performed I have no doubt the child, if it survived the shock of the operation, would have made a rapid recovery.

Amputation at the hip-joint has been a very unsuccessful operation, but it must be remembered that in nearly every case, it has been performed for injury, that is a person in full health struck down by a bullet shattering the femur, or in the case of railway accidents or injuries from machinery, where the patient dies from shock of the accident and not of the operation? I have seen two cases; one where a railway porter had his thigh and leg crushed to jelly; this man, although a fine powerful fellow, survived the operation only a few minutes. Another was that of a delicate man who had previously suffered amputation of the leg, for malignant disease of ankle-joint; the disease returned in the knee some time

after; amputation at the hip-joint was performed, great care being taken not to lose much blood, and the patient made a rapid recovery.

Mr. Carr Jackson, of the Great Northern, has performed this operation with success in cases where the hip-joint had been unsuccessfully excised. Granting, however, that the rate of mortality might be rather high, would it not be much better to give the child the chance of a rapid recovery, than to let the poor thing lie, it may be six months or even five years, suffering from the continuous discharge, from bed-sores, from the daily changing of dressings, etc., to say nothing of the constant nursing required, and the great expense consequently involved. As to facility of locomotion after this operation and after excision of hip or the spontaneous cure of the disease, there is little to choose. A crutch or a pair of crutches are generally very acceptable, even if not absolutely necessary in all cases, so that that would not be an objection to the operation. Of affections of the knee-joint, the same may be said as of the hip. The disease will always be found to date from an injury, however remote, however slight; will show itself in two classes of cases, the strong and healthy, the weak and scrofulous.

In the former class, if the case receive proper attention recovery will take place in a great number of cases without an operation, rest, &c., being all that is necessary. It is from the fact that so many are neglected, that so many require operation, they either keep about until the disease has advanced too far, or they will not give the limb long enough rest for a complete recovery, and after a short time inflammation is re-excited, which becomes more and more difficult to arrest; the joint becomes destroyed and excision is called for. In this class of cases, excision of the knee-joint is very successful. I saw a case operated on by Mr. Henry Smith; seven weeks after the man walked into the theatre completely recovered. He was a strong healthy farm laborer who had neglected an ordinary sprain of the knee.

In the latter or scrofulous class no treatment will avail; you may arrest the disease for a time, and send your patient home with the idea that a cure has been effected. It may be a month or it may be several months after, you will be surprised to see the same patient turn up either at the same or, what is much more likely, at some other Hospital, with the joint in a much worse state than when you first saw it; the case goes on in spite of all treatment; the joint destroyed, there is profuse suppuration, great pain, deterioration of health; in fact the time has arrived when something must be done or the patient will die

of exhaustion. There remains one of two evils, either amputation, with the chances of a speedy recovery, or excision, with certainty that even if the patient does recover, he must first spend many weary weeks, if not months, in bed, and then perhaps when there was hardly any life in him undergo secondary excision or amputation as the very last hope. I knew of a case where the knee-joint was excised; seven months afterwards it was excised again and then three months afterwards amputation of thigh was performed, the excision being unsuccessful. The following cases of two children about the same age lying in adjoining beds, treated and fed in the same way, operated upon by the same surgeon, afford a strong contrast, and support what I have already said.

One child was ruddy and healthy, the only abnormality being advanced disease of knee-joint following on an injury received many months before, and for which the child had not received any treatment until admitted into hospital, when the joint was excised. Exactly one month from the day of the operation the splint was removed. Firm ankylosis had taken place and there was nothing but a surface sore to show that an operation had been performed. The other case was that of a weak, whinny, sore-eyed, scrofulous child, who was admitted for disease of the knee-joint, which was excised. This case in the after treatment received even more attention than the other one, the greatest possible care being taken not to allow any movement of the limb. Four months afterward, although union had taken place, it was not sufficiently firm to allow of walking, nor do I think that it ever would be.

As to the mode of excising the joint, some of the surgeons make two lateral incisions with a transverse joining them, and after removing the ends of the bones, bring the inside and the transverse incisions closely together with sutures and leave the outside one open for a free discharge of pus. The splint usually used, was a back splint with foot-piece interrupted beneath the knee-joint by means of two iron bows, one on each side. Sometimes a small trap door was made underneath. By these means the joint could be dressed without the slightest motion. Other surgeons prefer a single incision across the limb, opening directly into the joint, or rather where the joint ought to be. Different kinds of splints, more or less expensive have been devised, but nothing can answer better than an ordinary interrupted back splint with a foot-piece, bandaged carefully up to the knee and down to the knee. Strips of lint soaked in a solution of carbolic acid formed the usual dressing; when union had taken place, a

plaster of Paris bandage or a gutta-percha splint was applied and the patient sent to a convalescent home. With regard to other affections in and about the knee-joint, such as loose cartilages, inflammation of Bursæ, etc., there was nothing special in their treatment.

Progress of Medical Science.

SUDDEN DEATH IN PUERPERAL CASES.

BY S. L. JEPSON, M.D., WHEELING, W. VA.

No class of diseases that the physician is called upon to treat is invested with the same amount of interests as those incident to the puerperal state.

The sudden, the unexpected death of the puerperal patient is an accident that, more than any other that occurs in the physician's experience, appalls him, and produces a realization of his own weakness in a strife with the "dread adversary."

It is not necessary for us, then, to impress the importance of every physician so in forming himself as to the cause, prevention, and cure of puerperal accidents, that he shall be able to give his patient such counsel and such treatment as will best conduce to her welfare by enabling her to pass through the process of childbirth, and the critical period following, with the least possible danger. It is certainly our duty as well as our interest to search out, by every possible means, the causes, however deeply hidden they may be, of these fearful accidents, and to devise means whereby they may be avoided, or, if this may not always be, whereby dangerous symptoms may be met promptly, and a fatal result prevented, if this lies within the power of human agency.

In furtherance of this end, we propose to present, in as brief form as possible consistent with clearness, the principal causes of sudden death during and after labor, as far as we are able to determine them. We shall also attempt to point out the predisposing circumstances present in each case, and offer, in conclusion, a very few remarks on the subject of *treatment*, especially that which is preventive.

I.—SYNCOPE.

Though this term is familiar to us all, yet it may be well for us, since it is sometimes loosely applied, to have a distinct understanding of its meaning as here used before proceeding with our remarks. The definition of this term, as given by Dunglison, is, "A complete and generally sudden loss of sensation and motion, with considerable diminution or entire suspension of the pulsations of the heart and the respiratory movements." Absence from the brain of its proper proportion of blood is the condition giving rise to the most important phenomena of syncope. The *causes* of this condition are innumerable, but are well classified by Copland as follows:

I. *Those causes which act more immediately on the nervous system.* We may name, as examples of

this class, depressing emotions; as, sudden terror, anxiety, disappointment.

II. *Those which affect chiefly the vascular system.* Examples: advanced heart disease, loss of blood, sudden removal of pressure from large blood-vessels.

III. *Causes acting upon the heart through the nerves.* Example: offensive and nauseating odors.

Brown-Séquard has recently expressed his belief that syncope may result from contraction of the blood-vessels of the cerebral lobes from spasm, and consequent diminution of blood supply. This spasm he regards as a true reflexion, the consequence of some peripheral nerve irritation.

Let us note briefly some of the conditions which render syncope especially common and dangerous to the puerpera.

(1.) There is always a temporary prostration of the vascular system after parturition. This is to be expected when we reflect that there is almost invariably a considerable loss of blood, which sometimes amounts to a hæmorrhage. Again, there is generally a profuse secretion from the skin, induced by the parturient efforts, which is in itself prostrating. But the enfeebled circulation is due mainly to the collapse which always ensues after violent muscular efforts, intense pain, and the inordinate excitement of the heart and arteries (Hodge).

(2.) The removal by the birth of the child, of the mechanical support to the large vessels of the abdomen. We have all witnessed the occurrence of, or tendency to, syncope of the patient tapped for ascites. The artificial support seems to become a sort of necessity, and, the abdomen having become so distended by pregnancy, we have not even the natural support of the viscera. This must be substituted by other support, if we would prevent unpleasant results.

(3.) Actual diminution of the quantity of blood in the circulation, in consequence of which it becomes more difficult to keep the cerebral vessels supplied. Of course, this is especially true when hæmorrhage has occurred.

(4.) The nervous susceptibility is highly exalted after labor. This is so common an observation, and the causes of this condition are so obvious, that comment is unnecessary. The connection between nervous irritability and syncope is obvious.

(5.) In this connection we may mention, as an aggravating circumstance, that extreme mental depression which exists in not a few cases prior to and during confinement, being the result of a long-felt fear—"a presentiment," the patient calls it—that the labor will terminate fatally.

(6.) Another condition which operates unfavorably in a number of cases is that extreme muscular relaxation, and consequent dilatation, of the walls of the heart, which is the consequence of anæmia during pregnancy.

We have, then, as predisposing causes of syncope in the newly-delivered woman: 1. Increased nervous susceptibility; 2. Mental depression, or the results of it; 3. Prostration of the vascular system; 4. Diminution of blood-supply; 5. Removal of support from the abdominal vessels; 6. Weakened heart-

action, the result of dilatation.* Either of these conditions, with the presence of an exciting cause, would be sufficient to bring on syncope; but when two or more operate together, as is generally true in these cases we should not be surprised at its frequent occurrence.

The above being conditions *favorable* to the occurrence of syncope, what are the *exciting causes*? These are so numerous that we cannot stop to mention them, nor is it necessary even were it possible. Let us, however, examine the *modus operandi* in a few cases.

The influence of position in determining the momentum of blood in the vessels is well known. Now, suppose our patient, with causes 3, 4, and 5, as numbered in our summary of predisposing conditions operating, should suddenly assume the erect position. The consequence is that an equally sudden gravitation of blood takes place, the vascular distension of the brain becomes instantly lessened, and a sensation of faintness comes on, often, it is true, but temporary and trivial in character, but occasionally, and especially in cases already much prostrated by loss of blood and other causes, it becomes fatal. And this danger is much increased, as Meigs points out, if fresh hæmorrhage should be brought about, as might very easily be done in a womb not perfectly contracted, by this sudden change from the horizontal position.

Suppose, again, with causes 1, 5, and 3 operating, any communication of a startling nature be incautiously made to the patient. We might expect to see the cheek blanch, and to feel the pulse grow feeble beneath our touch, the heart almost literally "standing still from fear." The same result may follow any *physical* impression, as a blow or sudden pain even of the most trivial character (Cazeaux).

Prof. G. T. Elliot thinks that in these cases fatty degeneration of the heart may frequently serve as an important factor in the causation of syncope. Hodge speaks of syncope occurring during or after labor, especially in women of an excitable temperament, "where the symptom is purely of a nervous character." Bedford records a fatal result where the "causes of the syncope was simply emotion."

But we make no attempt to trace the causes of this symptom further, believing it may almost always be explained in one of the ways already indicated.

It is not necessary to speak of the *symptoms* of syncope, which are familiar to us all; so we proceed at once to the consideration of our *second cause of sudden death*, viz.:

II.—SHOCK.

By this term we understand that disarrangement of the harmony of action of the great organs of the body, the result of a sudden disturbance of the functions of the circulatory, respiratory, and nervous

symptoms (Erichsen). The symptoms are such as result from the combination of the effects of depression of the heart's action, and interruption of the functions of the brain and nervous system. In some of its phases, shock is closely allied to syncope, and resembles it when the operating cause "affects the intimate organization and circulation of the brain"; and if depression of the vascular system should predominate over that of the nervous, we may expect to find our patient lying in a state of syncope. If, however, the nervous system is chiefly affected, the heart's action may be restored to its natural strength, and yet the patient remain insensible (Druitt).

In a large number of cases we find a certain degree of collapse after confinement. The pulse for a time, instead of being full and somewhat frequent, as it is apt to be during the process of parturition, is slow and soft, and the patient experiences a feeling of exhaustion beyond what is common and natural. Though this state is generally speedily recovered from, yet the shock may be so violent as to result fatally in a few hours, or even before the delivery is completed.

Whatever tends to diminish vital resistance, predisposes to shock. Some of the circumstances that may operate in puerperal cases are the same as those we have named as predisposing to syncope. The principal conditions may be named as follows:

1. *Great mental despondency*, the result of a dread of an unfortunate termination, or other causes.

2. *A delicate, highly-nervous organization*.—As tending to bring about an irritable state of the nervous system, we may name the excessive nausea and vomiting that sometimes occur in the last weeks of pregnancy.

3. *The existence of organic disease*, especially of the heart, brain, or kidneys. These diseases act not only by reducing the strength of the system, but also, perhaps, by damaging the quality of the blood (one of them, at least), and impairing the force of the circulation.

We will not stop to name other unfavorable conditions, as they will readily occur to you. Given these predisposing causes, we may name as more direct factors in the production of dangerous or fatal collapse: 1. Excessive severity, with or without long duration of labor. Pain to a certain extent is conservative, but, when great and long-continued, may completely prostrate or overwhelm the nervous centres. 2. Hæmorrhage. 3. Extensive contusions and lacerations of the soft parts, as perineum and vagina, and rupture of the uterus or bladder. All these causes operate during labor, but their influence extends to the *post-partum* period. It is not necessary to enlarge on any of these points, as their mode of operation is plainly marked. 4. An additional cause of shock is found in the extensive sloughing that may follow contusions of the vagina or cervix uteri, the result of protracted pressure of the foetal head, or the unskilful use of instruments. Dr. Thomas More Madden has recently given the report of a case of sudden death from shock "induced by sloughing of the cervix uteri." (AM. JOUR. OBST., Aug., 1871).

* We do not pretend, of course, that all these conditions are present in all puerperal cases, though an examination of those cases in which syncope occurs would perhaps discover more of them present than we are apt to suppose.

He remarks that no other writer, as far as he is aware, has mentioned this cause of sudden death. Blundell treats at some length of causes which, if not identical, are certainly similar to the one in Dr. Madden's case. "Dreadful contusions and mortifications," he remarks, "are apt to occur in laborious labor, from the rude action of the hand, perhaps; from violent efforts to abstract the head with instruments; from frequently repeated but unavailing labor-pains; and, above all, from impaction of the head in the cavity of the pelvis.....By any of these causes, intense mortifications, sweeping all round the upper or inferior part of the vagina, may be produced. If these sloughs are superficial, they are less dangerous; but if they lie about and penetrate deeply, death at the end of a few hours...is not unfrequently the result, the system giving way under collapse."

The symptoms and phenomena of shock are so fully pointed out in all surgical works that we will not stop to notice them. That it may prove speedily fatal in the puerperal as in the surgical patient, is a fact no one will deny.

Having thus briefly referred to fatal collapse, and some of its causes, we pass to the *third cause of sudden death*, viz.:

III.—EMBOLISM.

Under this term, for convenience, we will include the phenomena of *thrombosis*, by which we understand the process of *clot-formation* and *embolis*, or *clot-transmission*. This is a subject which, until a comparatively recent period, was but imperfectly understood, and doubtless many cases of sudden death have occurred, both in puerperal and other patients, which were, for want of a clearer knowledge of this subject, ascribed to lesion of the heart or brain.

There is possibly now a danger of the profession running to the extreme in another direction, and of ascribing to *embolism* every sudden death that occurs. However this may be, deaths from this cause certainly do occur, and some of these cases we find among lying-in patients. Dr. Madden, to whose paper we have already referred, gives it as his opinion that "this is the most frequent cause of sudden death after parturition."

And we name, 1st. *The peculiar altered condition of the blood of the pregnant woman*. It is well known that during the latter months of pregnancy the blood differs decidedly from its normal condition, the essential, and to us most interesting, change being a marked increase of fibrine, with diminution of the corpuscles. This condition of the blood continues for some time after the occurrence of parturition.

With the large increase that we have named, the increased danger of thrombosis occurring is readily seen; and, with some of the unfavorable conditions that are often present in the puerperal state, even *spontaneous coagulation* may occur at any time.

2d. *Anemia may exist previous to confinement*, which would aggravate the hyperinosis of pregnancy, since a relative increase of fibrine is characteristic of

this condition likewise. Anæmia would also act unfavorably by inducing a flabby or relaxed condition of the muscular walls of the heart, and thus impairing the force of the circulation, which, as we shall hereafter see, favors clot-formation.

3d. *The loss of blood after delivery* acts also in these two ways, viz., by depressing the circulation, and by destroying the normal relation existing between the fibrine and blood-corpuscles, leaving the former relatively increased.

4th. *The occurrence of inflammation*, which is a quite common sequence of parturition, would still further increase the danger from this cause. Especially is this true of inflammation of the lungs, which may itself arise in puerperal cases as a consequence of embolism. When this disease exists, an overaccumulation of blood may occur in the right cavities of the heart, from the presence of the exudation preventing a free passage of blood through the lungs. The right ventricle and auricle are enfeebled by distension, and this condition, in conjunction with the increase of fibrine in the blood, leads to coagulation (Flint). A death from embolism, with the conditions of pleuro-pneumonia and the puerperal state, occurred in this city a few months ago. The patient was convalescing favorably, and, while sitting up in bed, the respiration became suddenly embarrassed, other symptoms of heart-clot were present, and death occurred in half an hour. An autopsy verified the diagnosis previously made Dr. R. H. Cummins.

5th. *Post mortem of the vascular system*. This mode of sudden death was pointed out by Meigs as long ago as 1849.

6th. *Open state of the uterine sinuses*, facilitating the entrance into the circulation of either detached clots or particles of other foreign substances that may serve as nuclei for the collection of fibrine. Sir James Simpson has pointed out that "morbid matters sometimes pass into the circulation in the puerperal state, through the uterine veins, and are afterwards carried round with circulating mass... Some of these appear to have a direct tendency to produce coagulation, or consolidation, in the super-fibrinated and diseased blood."

7th. *Severe contusions and lacerations during labor*, by which vessels of considerable size sustain mechanical injury, and through these, if ruptured, detached clots or any foreign substance may pass into the circulation, as through the uterine sinuses. Or, a coagulum may be formed in the vessel, as a consequence of external irritation. It is a well-established fact that clotting of blood in a vessel may be caused by irritation *outside* the vessel, even the pressure of an enlarged gland sometimes producing this result. The same result sometimes follows gun-shot wounds, open sores, or bone fractures. It is only necessary to suggest that many sources of similar irritation frequently arise during the process of parturition.

8th. *Inflammation of veins*, as in the phlegmasia dolens, which is not a rare sequence of parturition.

The more common danger, perhaps, is that which may arise from the formation of a thrombus at the

seat of the phlebitis, the condition present in phlegmasia colens. A portion of this clot may become detached, by external manipulation or other disturbance, for example, pass into the blood current, and all the phenomena of embolism, followed by speedy death, are liable to occur. In the celebrated case of Druitt, a clot twenty inches long, and "with every appearance of having been formed in the femoral vein," was found curled up in the right auricle and ventricle.

9th. *Co-existing Heart Disease.*—Another condition which, should it be present, would add to the danger of embolism arising, is the co-existence of that form of heart disease in which a roughening of the valves or lining membrane exists, or in which vegetations are found, which conditions favor a deposit of fibrine. The existence, also, of dilatation would increase the liability of this deposit taking place, by weakening the ventricular contraction, and thereby diminishing the force of the stream.

IV.—PRE-EXISTING HEART DISEASE

We name as a fourth direct cause of sudden deaths in puerperal cases. We have already referred to several forms of heart disease, as being favorable to the occurrence of *certain other conditions* that act as the direct cause of sudden death. We now wish to say a few words concerning those forms of disease of this organ which may, and often do, independent of the puerperal state, produce unexpected death.

Such is the case with certain valvular lesions, as aortic 'insufficiency, which, although no symptom may present during life to point to the existence of organic change, sometimes causes death, and this very suddenly, the heart becoming paralyzed by overdistension of the left ventricle, which we once saw result from the sudden effort of a patient to rise in bed.

V.—HÆMORRHAGE,

Especially internal or concealed, we mention as a fifth cause of sudden death. We refer now to hæmorrhage which is of such an amount as to act as the direct cause of sudden death. Ordinary *post-partum* hæmorrhage may, and not unfrequently does, terminate life speedily; but in these cases the danger is known and appreciated by the physician, and hence death, when it occurs, cannot be said to be *unexpected*. We therefore pass this point without further remark.

Unexpected death is more liable, to result from *internal or concealed* hæmorrhage. This may occur before the completion of pregnancy, or, which is more common, during labor, before the expulsion of the fœtus the placenta becoming detached in the centre and the blood collecting beneath it, while the circumference, remains attached to the uterus. Or, if the hæmorrhage continues, the membranes may become detached over a large extent of the uterine surface. The symptoms of this accident, as pointed out by Cazeaux, may be thus briefly stated: the general phenomena that accompany all losses of blood are present; rapid enlargement of the abdomen occurs; abdomen becomes painful; abdomen becomes separated

by a depression into two prominences, the one representing the collection of blood, and the other the ovum; occasionally an obscure fluctuation can be detected; labor-pains are sometimes weakened or suspended. This, however, is a rare form of hæmorrhage, and a still more rare cause of sudden death.

We attach much more importance to that form of concealed hæmorrhage which occurs after the birth of the child. This may occur before the expulsion, but after a partial or complete detachment of the placenta has taken place, and before the uterus has ever become firmly contracted. The placenta, membranes, and clots serve as a tampon, and hæmorrhage continues without interruption, in consequence of aterine inertia. We feel justified in saying that hæmorrhage under these circumstances could never occur without the physician's knowledge of it, but from gross neglect on his part.

Firm contraction of the uterus around the placenta, however, may occur, and relaxation again speedily take place, followed by bleeding, the placenta and membranes being sometimes pushed down into the vagina, and presenting to the touch the sensation of a second bag of waters (Blundell). Dr. J. Braxton Hicks, in a recent paper, says he has met with three cases of this kind, "the membranes remaining attached to the lower part of the uterus, while the part of them towards the fundus becomes, along with a portion of the placenta, separated by the effusion of blood, which gradually pushes it down towards and through the os uteri." AM. JOUR. OBST., Feb., 1872.

But there is another form of hæmorrhage which may occur after every proper precaution has been taken. We refer to bleeding, which not unfrequently comes on as the result of secondary inertia. This may occur a few minutes, or hours, or even days, after the completion of labor, and after the accoucheur has decided that the uterus is firmly and properly contracted. The time of greatest danger is the first hour or two after the delivery of the after-birth. The discharge of blood from the vagina in these cases may be prevented by a portion of the placenta or membranes that have been left behind becoming engaged in the os; by a collection of conglua; by too great elevation of the hips; by spasmodic contraction of the os uteri, the fundus and body remaining relaxed; or by the closure of the vulva by the napkin that has been improperly placed. This form of bleeding is especially dangerous when occurring soon after delivery; and the danger is increased if the hæmorrhage should come on during the sleep of the patient. In this case it is more apt to progress to a fatal result without detection.

Some authors speak of still another cause of uterine hæmorrhage, which may come on several days after labor, viz., *congestion of the uterus*. Madame Lachapelle says she has known "a woman to suddenly perish seven or eight days after her confinement from a profuse discharge of serous blood, ... which saturated, by imbibition, the most solid tampon. The womb was soft, but not distended with blood." We have seen one case in which serious hæmorrhage, commencing very suddenly with the discharge of clots, came on after the tenth day, and which, we think,

might have proved fatal but for an immediate resort to vigorous measures. Since, however, great relaxation of the uterine tissues does not occur in these cases, it is rarely that they progress to a sudden termination of life. Such a result might be brought about by a delay in the use of remedies.

We now pass to a brief notice of our last prominent cause of sudden death, viz. :

VI.—ENTRANCE OF AIR THROUGH THE UTERINE SINUSES INTO THE CIRCULATION.

This is a subject which, until a comparatively recent period, received no study; and even now points remain which need further elucidation. The possibility of this accident occurring was first suggested by the younger Legallois over forty years ago, his father having observed the sudden death of a rabbit after parturition, an autopsy of which revealed the presence of air in the right auricle, pulmonary artery, anterior and posterior venæ cavæ, and uterine veins. The subject has since been developed by Simpson, John Rose Cormack, George May, Jr., Dr. Green, of Mass.,* and others; so that at the present day it is generally conceded that *air may enter the uterine veins after child-birth*, and the death may result from this cause.

It has long been known that air may enter the circulation after injuries or surgical operations; and that this occurs generally through the large veins about the neck, the location of which has hence acquired the name of the "dangerous region." This may happen when, from any cause, the incised extremity of the injured vessel is kept from closing; and the explanation generally received is, that during inspiration there is a tendency to the formation of a vacuum within the thorax, by which the air is drawn into the cut vein. Hence it has been noticed that air never enters the veins of the neck except during inspiration; and that during expiration air which has entered may even in some measure be expelled.

Now, when we examine the exact state of the newly delivered woman, we find conditions that are equally favorable for the occurrence of this accident. After accouchement the uterine veins are exceedingly large—"the size of a goose-quill, and some of them will admit the little finger without lacerating" (McClintock). They are also free from inosculation, and are without valves; and in a relaxed condition of the uterus are patulous.

The condition of the uterus and veins being favorable, then, how is the introduction of air brought about? The entrance of air into the vagina and uterus is the first step. Churchill thinks it may penetrate during the process of expulsion of the child, or that it may be present as the result of decomposition. Perhaps, however, it more commonly enters after the birth of the child. Dr. Adolph Ruch, after a careful investigation of the subject, has found that, by placing a multipara, whose genitals are in a normal condition, in the prone position or on all

fours, air will enter the vagina, if the vulva be open, "because the intestines, falling downwards by gravity, cause a vacuum." (Dr. Barnes's *Lecture, Lancet*, Feb. 10, 1872.) He did not find this to occur when the patient was on her back or side, though we can readily imagine it might do so if the head was much lower than the pelvis, and with the relaxed and heavy state of the uterus which we find after delivery. Dr. Barnes, in a recent lecture says: "If an examination is made when the uterus is relaxed after labor, especially if the hand be introduced into the uterus, the vaginal walls are separated from their usual contact, and a channel is formed along which air easily enters. Merely turning on the side, or a little more prone, will often, by favoring a fall of the uterus forwards, produce a vacuum, into which air will rush." Now, is it not possible, during this rush, for the air to enter, not only the vagina and uterus, but even at the same time the open sinuses? Or, a large quantity having once entered the womb, a repetition of the same cause, viz., falling suddenly forwards of the uterus and intestines, might force the air into the veins. This would be especially liable to occur if the detached placenta, or a remaining portion of it with membranes, covered the os in such a way as to permit the entrance, and yet prevent the exit, of air; in other words, to act as a valve at the os.

Amussat thinks that the respiratory movements even by elevating and depressing the intestines, may operate here as at the neck, and a suction action, or "venous inspiration," be produced.

But Simpson gives another explanation of this occurrence, accounting for it in this way: "Supposing air once introduced into the uterine cavity, which in some cases may occur in consequence of the alternate relaxations and contractions of the organ following delivery (as in after-pains, post-partum hæmorrhage, etc.); and supposing further that, under the returning contractions of the organ, the expulsion of this air was prevented by the presence of a clot at the os uteri, or other such obstructing cause; it will then, under the compression to which it is subjected, be liable to be driven into the open venous orifices existing in the lining membrane of the uterus." (Works, vol. ii., p. 721.) Dr. Cormack accepts this explanation, and even emphasizes it. He says: "Should any impediment be offered, in such cases, to the free exit of air by the os uteri, must be forced into the uterine veins, were their mouths not protected by coagula."

Symptoms.—It has been found by experiment, and in the observation of cases, that there must be either a considerable quantity of air present, or that it must enter the circulation with considerable force, in order to cause speedy death. A small quantity, injected slowly, produces but temporary disturbance. The symptoms present in serious or fatal cases we abbreviate from Dr. Green's paper as follows: The patient suddenly turns pale, utters a cry of alarm, as if death were impending, and becomes insensible. Or there may be observed anxiety of countenance, labored respiration, lividity of the lips, dilated pupils, convulsions. The pulse is generally

* To whose interesting paper in the *Amer. Jour. Med. Sci.*, for Jan., 1864, we are indebted for many facts here given.

feeble, often being imperceptible. Sometimes, however, violent and irregular action of the heart is observed. Again, lividity of the face and stertorous breathing may be prominent symptoms. A cold sweat often breaks out on the face. A violent cough has been present in a few cases. In one case auscultation of the heart revealed a churning sound, completely masking the natural valve sounds.

Dr. Simpson gives prominence to the "evanescent red scarlatinoid rash over the body," which he saw in several cases, and which, he suggests, may possibly be due to a direct mixture of the introduced air with, and consequent oxygenation of, the blood in the capillary vessels.

Post-mortem Appearances.—Autopsies have been made in a number of cases in which death occurred soon after parturition from this cause. None that we have seen recorded are any more satisfactory than that of Simpson; hence we give it. The patient had been delivered of twins, hæmorrhage had occurred, with alternate contractions and relaxations of the uterus; a number of the symptoms named above presented, and the patient died in a few hours. Suspecting that death had been produced by the entrance of air into the uterine veins, "the body was opened a short time after death, because it was considered desirable not to incur the fallacy of air being present from decomposition... To make the examination more certain, the abdomen was opened under water. The lower vena cava, but especially the uterine and hypogastric veins, were distended with frothy blood, and air bubbled up through the water when any of these tubes were opened. The larger veins of the extremities were in the same state" (*op.cit.*). Nothing is said of the heart in this case; but of nine cases, narrated by Mr. George May, Jr., air was found in the heart in five. In one case the "right auricle was distended with air. Hardly a trace of blood existed in the heart." In another, in which the autopsy was made before the body was cold, the heart appeared distended, and "on opening the right auricle a quantity of air escaped with a sort of little puff, and the organ was at once reduced to its proper dimensions" (*Am. Jour. Med. Sc.*, Oct., 1857, from *Brit. Med. Jour.*, June, 1857). In cases recorded by other observers, the heart has been found distended with frothy blood.

The proximate causes of death in these cases is a point upon which authors differ widely. The following points seem to us to embrace the most rational, and are perhaps the most generally accepted, views of the profession.

1st. Distension of the heart by air, or air and blood beat into a spumous mass.

2d. Consequent imperfect closure of valves.

3d. Inability of the heart, on account of these conditions, and from the presence of frothy blood in the pulmonary artery, to propel a sufficient quantity of blood to the lungs.

4th. Consequent diminution or loss of healthy supply to the brain and nervous system.

These views are not inconsistent with the opinion of Gross, who attributes death to "a want of suffi-

cient oxygenated blood in the great tripod of life—the heart, lungs, and brain."

The above-named six causes—viz., syncope, shock, embolism, pre-existing heart disease, hæmorrhage, and entrance of air into uterine sinuses—account for a very large proportion of sudden deaths that occur during or soon after parturition. There are, however, a number of minor causes that may operate in rare cases to bring about this unfortunate result. Among these we may mention *pulmonary oedema*. There are a number of conditions not unfrequently present in the puerpera that may give rise to this result. We may name among these, degenerative lesion of the kidneys; anæmia, with dilatation of the heart, both conditions predisposing to serous transudations; general oedema of pregnancy, which, as Meigs says, renders the patient prone to effusions into the pericardium and lung substance; and the long continued recumbent position favoring, especially when there is a low condition of the system, hypostatic congestion, which precedes lung infiltration, from which speedy death by apnœa may result.

Again, Dr. Madden has reported a case of sudden death resulting from *rupture of a varicocoele of the ovarian vein*. Dr. Simpson has seen death occur from *rupture of a hepatic abscess* during labor, and another from *peritoneal fissures on the uterus*, from which fatal bleeding took place. Cazeaux points out the danger of death being produced during labor by the *rupture of a large aneurism*. He likewise thinks death may result from the occurrence of severe *hæmoptysis* or *hæmtemesis* during the violent throes of a second stage of labor; and Blundell relates a case of death from hæmorrhage consequent on *rupture of pulmonary vessels*. The same author gives the history of another case of instant death during labor, in which a *post-mortem* examination revealed a *laceration of the right ventricle of the heart*.

Treatment, especially that which is Preventive.

1st. We believe in the teaching which Hodge enforces, that the woman should be delivered on the bed on which she is to lie during the puerperal period, which plan avoids the exhaustion, syncope, hæmorrhage, and other evil consequences which may follow her removal from one bed to another after confinement.

2d. Let her also be in the dorsal position at the close of a second stage of labor and afterwards, which, in addition to many other advantages, lessens the probability of air entering the uterus, and hence the uterine veins.

3d. A point suggested by our friend Dr. Hupp we believe an important one—viz., remove all pillows from the head and shoulders immediately after the expulsion of the child, which obviates any tendency to syncope, and may in some cases prevent hæmorrhage, by diminishing the force with which the blood flows to the uterus.

4th. We believe much danger will be prevented by adopting Crede's method in removing the placenta. Even during the expulsion of the child, instruct the nurse to grasp the fundus of the uterus, and follow it down as it contracts, keeping the hand

in position until the accoucheur has given the necessary attentions to the child. Let him then, during the first contraction that occurs after the escape of the infant, "embrace the fundus and the superior part of the anterior wall of the uterus with the entire right hand placed transversely; then press downward and backward, assisting, if necessary, with the left hand. Under this pressure the placenta and membranes are detached, then engage in the uterine orifice—sometimes even escape suddenly from the vagina, just as a cherry-seed escapes when the cherry is pressed between the thumb and finger." The advantages of this method are an early expulsion of the placenta, with no probability of retention occurring at any time; a firm contraction of the uterus is ensured, and thus hæmorrhage and the entrance of air prevented.

Dr. G. Chantreuil reports five hundred and forty cases in which this method was adopted, and not a single case of hæmorrhage or placental retention occurred. In five hundred and eleven of these, the placenta was removed within six minutes, and in more than one-half within three minutes, after the birth of the child (*Am. Jour. Obst.*, Aug., 1871).

Professor Parvin, who has published an interesting paper on this subject, says: "Since pursuing essentially the practice advised by Crede, I have not had a single case of hæmorrhage, nor have I had a single case in which the placenta was not delivered within, at the most, ten minutes after the birth of the child" (*Am. Practitioner*, Sept., 1871).

5th. After the placenta is expelled in this way, let an assistant grasp the uterus, and thus keep it contracted until the bandage is applied. If this is not done, and coagula collect, let them be carefully removed, and also *all* of the placenta and membranes.

The womb should be firmly contracted before the bandage is applied; and all will agree that it is wise to remain with the patient at least one hour after the birth of the child. Yet these rules, especially the last, are often neglected, and many physicians can recall cases of violent, if not fatal, hæmorrhage as a consequence.

6th. Many eminent physicians, especially among the French, have adopted the practice of invariably administering a good dose of ergot immediately after the child is born. We are inclined to regard the practice a good one, and particularly with multiparæ.

7th. We are decidedly in favor of the bandage, and believe the reasons generally given for its use are sufficient, while the objections, when it is properly applied, amount to *nil*.

8th. We are likewise a believer in the practice which restricts the patient to low diet for a few days, because of the peculiar excitability of the system at this time, and the predisposition to violent reaction. Cases, of course, occur in which it is wise to depart from this practice.

9th. Symptoms of shock, syncope, hæmorrhage, etc., must be met with appropriate remedies as they arise.

10th. See that all causes of excitement and mental disturbance are carefully avoided, and keep

the patient in the recumbent position for at least two weeks. Hodge advises that she pass the greater part of a month in this position, and we believe the advice good. Churchill says that "far more mischief results from premature exertion than from all errors in diet added together.

Because a large majority of women pass through their confinement without any unlooked-for difficulty, and convalesce without disease or accident, and because very many women of the laboring classes, after being delivered, perhaps, by some ignorant old woman, are permitted to be out of bed, on the fourth or fifth *day*, and are even sometimes at the wash-tub, or other laborious employment, within the ten days which the more refined puerpera is expected to pass strictly in the recumbent position, and all this without any apparent * impairment of health—because of these things, we are apt to become careless, leaving our newly delivered patient too much to her own will, instead of giving her proper caution and instruction, by heeding which a life of torment, or even death itself, may be prevented.

We would urge, then, that the physician should, in all cases, give full and explicit directions for the care of his patient, and insist on these being carried out fully, seeing to it that the nurse shall be the *servant*, and not the *mistress*. Nor is it easy to sufficiently impress the puerperal patient with the danger of premature exertion, since serious accidents are comparatively rare. Women do not like to lie in bed when they feel that they are not sick; but it should be insisted upon, since it is much better that ninety and nine should submit to this inconvenience, and reap the benefit of it, than that one should perish from want of proper care.

A few words as to the *treatment of cases in which air has entered the veins*, and we have done.

1st. Remove clots or other obstruction at the mouth of the womb which may prevent the free exit of any pent-up air. Resort to pressure, and any other proper means that may be necessary to bring about a firm contraction of the uterus.

2d. Resort to artificial respiration, which by keeping up the action of the heart, may lead to the propulsion of the spumous blood through the capillaries. Electrization of the phrenic nerve has also been used.

3d. Always keep the patient in the recumbent position, which promotes the flow of arterial blood to the brain. Pressure upon the abdominal aorta, or iliacs, and upon the axillary arteries, has also been recommended for this purpose.

4th. Opening the right jugular vein is also recommended by surgical writers, in the hope of directly relieving the right side of the heart of an excess of venous blood.

5th. In addition to these means, brandy, diffusible stimulants, and all the remedies usually administered in syncope, are generally appropriate.

Preventive Measures.—Deliver the patient on her back. Give a good dose of ergot as soon as the child

(*) But *only* "apparent," since uterine diseases and displacements are quite common among laboring women.

is born. Practise Crede's method, already referred to. Compress the uterus after the expulsion of the placenta, as directed, until the bandage is applied. Allow no clots to collect in the uterus. Direct the patient to keep the thighs approximated. Abridged from *American Journal of Obstetrics*, August, 1872.

THE THERAPEUTIC VALUE OF THE MURIATE OF LIME.

In the *Edinburgh Med. Journal* for July Dr. Begbie has an elaborate memoir upon the therapeutic value of muriate of lime, in which he gives a review of the English literature on the subject as well as his own experience, which he states to have been large. He says that, as stated long ago by Dr. Beddoes, the salt is of very great value in the chronic diarrhoea of children, associated with feeble appetite, anæmia, enlarged belly, and hectic symptoms. He also adduces much testimony as to its remarkable efficacy in cases of scrofulous taint with enlargement of the cervical glands, confirming this testimony by his own experience. In such cases he has seen the most brilliant cures under its use, after the complete failure of iodine, cod-liver oil, and all the other orthodox remedies. In some cases it requires to be taken for a long time, in some instances, even for months, before its beneficial effects are seen; generally, however, the glands begin to soften and lessen in size after a few weeks, and the general symptoms consentaneously to improve. The salt has a disagreeable, mawkish taste, to which patients generally soon become accustomed, especially when the drug is taken in milk. Dr. Begbie also affirms that the chloride is of equal value in acquired and hereditary scrofulous adenitis. He states that he has used it with great benefit in *tubercles mesenterica*. In Paris he saw it used many years ago by Cazenave with asserted success in lupus. The dose for an adult is from ten to twenty grains three times a day, gradually augmented to thirty grains, unless symptoms of local gastric disturbance are developed. The Doctor is partial to the old solution of the *Edinburgh Pharmacopœia* as a ready means of administering the drug. To young children the commencing dose is from two to six grains. It is best administered in milk, shortly after meals, although it may be given with impunity in an empty stomach.

CHLORAL IN PUERPERAL CONVULSIONS.

In the *Dublin Journal of Medical Science* for June, 1872, Dr. McDowell details a case of puerperal convulsions and mania, in which chloral seemed "to act like a charm."

TREATMENT OF SPERMATORRHEA.

The occasional introduction of a catheter as large as the urethra will take, is often of the greatest service; it should be passed into the bladder and allowed to remain for five or ten minutes, according to the tolerance of the patient; its mechanical pressure helps to unload the congested capillaries and small vessels of the urethra; its contact deadens

and destroys the extreme sensibility of the urethral nerves, and renders them less susceptible to the influence of slight excitants; whilst, by stimulating the muscles, it provokes their contraction, and so renders material assistance in emptying the larger veins. A silver catheter is the best instrument for the purpose, as it exerts firmer pressure than an elastic bougie; and, as the urine can be drawn off through it, the patient will not require to micturate for several hours, which is a point of some importance, as the urethra is often very tender after the passage of an instrument for the first few times. The frequency with which it should be employed depends upon the amount of discomfort its presence occasions; and if the pain be great, it should not be left in more than a few seconds, lest rigors, swelled testicle, etc., be occasioned. Sometimes the urethra is *extremely* sensitive, and much pain attends the use of the catheter; but this is an additional reason for persisting with it, though a smaller one may be employed at first, so as to cause less pain. I have sometimes found that smearing the catheter with blue or calomel ointment, or with half a grain to a grain of nitrate of silver rubbed down in an ounce of lard, to be of use in obstinate cases; but I prefer the blue ointment to anything I have yet tried. Some camphar, extract of opium, belladonna, etc., may be combined with these ointments, if thought desirable. Care should be taken that these applications do not reach much beyond the curve of the instrument, and it should be thoroughly oiled before using it. The over secretion of mucus is always checked by the use of the catheter, whether armed with ointment or not.

Cold bathing, cold douches, etc., should not be employed on going to bed. The ordinary bath in the morning does good; but cold applications at night should be forbidden, as the reaction which follows them will increase the local circulation, and so cause congestion and erection of the penis, and thus increase the probability of emissions.

Not only must the position assumed in sleep be attended to, but undue warmth in bed avoided, whether by using very soft beds or too large an amount of clothing. The bowels should be carefully regulated, to prevent any accumulation within the rectum; and the urine examined from time to time, so as to detect an excess of uric acid, the presence of oxalates, etc., which may render its passage irritating to the hypersensitive urethra. Over distention of the bladder must, at all times, be guarded against, and the patient warned to pass urine on waking in the morning, lest he doze off again with a full bladder, which is one of the most certain provocations of erection and emissions.

Before commencing to treat this affection constitutionally, it is generally necessary to allay the digestive disturbances, which are so common and often so severe, by giving such remedies as may be applicable to the condition of the patient either with or without the more special medicines. By neglecting to do so, we may not only add to the dyspeptic troubles and obtain no benefit from the drugs given, but a valuable medicine may do harm and be brought into dis-

repute, in consequence of its being administered at a time when the stomach cannot tolerate it.

Internally, I have found astringents of more use in this disorder than tonics; or they may be combined. Gallic acid, the dilute mineral acids, especially the sulphuric, may be given. Tincture of matiao will often be of service, and more so, in my experience, than any other plant rich in tannin, as it appears to act upon the genito-urinary tract rather than upon the bowels, as is often the case with the others.

Ergot is one of the most valuable remedies for this affection, and the liquid extracts of the *Pharmacopœia* is a very efficient and convenient form for giving it; whilst the dilute sulphuric acid can be added, if thought advisable.

When the urethra is very sensitive, and the passage of urine painful, small doses of copaiba are often most comforting; or the other oleoresins may be tried if it disagree; but none of them, in my opinion, is equal in value to copaiba when it can be borne.

I am not disposed to regard strychnine in these cases with very great favor; when there is much irritability of the nerves, I believe it often adds to this; but when this is subsiding it may be of use as a tonic; so may quinine or iron, but in no other way. I have never given the tincture of iron in the enormous doses (from one to two drachms three times daily) recommended by some, and so I cannot speak personally of its value in such large quantity.

Cantharides, phosphorus (except the dilute phosphoric acid), and the so-called aphrodisiacs, do harm by acting as stimulants to the nervous system generally, and therefore to the local nerves. Cantharides, also, by its action upon the bladder is, especially when given in large doses, a very injurious drug in these cases. For the same reason I disapprove of local blistering; while the sore left by the blister acts, moreover, as a source of irritation, and adds to the liability of emissions.

Belladonna, in my hands, has proved to be an uncertain remedy; in some cases it has appeared to do good by allaying irritation, whilst in others there were no beneficial results from it. The dryness of the throat, disturbance of vision and diarrhoea, which are often caused by it, constitute an objection to its employment in full doses, and without them its value is very questionable.

Camphor is a most useful drug; three or four grains made up into two pills, with half a grain or a grain of opium, and one or two of aloes, have more frequently allayed irritability and prevented emissions than anything I have yet tried. Opium alone does not succeed as well, and a large dose is necessary, so that the untoward symptoms sometimes produced by it are more likely to be incurred.

I have tried chloral in a few cases, and with very great advantage; in doses of fifteen or twenty grains at bed-time it has answered its purpose admirably.

Bromide of potassium, in thirty or forty grain doses, will sometimes be of service; but it seems to me a less certain remedy than chloral, which I am disposed to regard as one of the valuable agents we

possess for these cases, though as yet my experience of it is limited.

Suppositories vary much in their action, whatever drugs they may contain occasionally they answer well, but often they do not lessen, and I am not sure they do not sometimes increase, the irritability of the parts.

Galvanism I have not employed myself; but in the few instances where I have known of its being tried by others, it has seemed to me to do more harm than good, by adding to the nervous irritation.

Lastly, as to cauterization by the *porte-caustique*, I need scarcely say than I am strongly opposed to this method of treatment; for, if my view of this disorder be correct, this instrument can relieve it in no other way than as the passage of the catheter does. I do not believe that ulceration or other morbid conditions of the ejaculatory ducts are the causes of seminal losses. We have no evidence that these pathological conditions exist, except, it may be, in very rare instances; and if so, the application of nitrate of silver to the prostatic mucous membrane in every case of nocturnal emission must be unnecessary; and in spite of its alleged harmlessness, I consider it to be a dangerous treatment. I have known two persons die from the effects of the *porte-caustique*, and I have seen others suffer severely from its employment. This may not be to the usual result; but I do say that the application of nitrate of silver to the urethra, whether in stick or in strong solution, is at least a very sharp remedy, and will often produce violent inflammation, and sometimes lay the foundation of a stricture or of a chronic irritation of the bladder.

If, then, caustic be applied on an incorrect surmise as to the condition of, and its effects upon, the prostatic mucous membrane and ejaculatory ducts, it is not only an unnecessary, but, in my opinion, an unsafe method of treatment.—*Gascoyne—British Med. Journal.*

ON THE TREATMENT OF ASTHMA.

Mr. George Gascoine, surgeon to the British Hospital for disease of the skin, says in the *British Medical Journal*:—

In the summer of 1870 I was summoned to a lady suffering from an acute asthma, to frequent attacks of which she was subject. Nothing had been omitted in her previous treatment, which was simply palliative. She was recognized as constitutionally asthmatic, and little hope was entertained of permanent amendment. The asthma first occurred on the subsidence of nervous symptoms a few years previous. It had not, as far as I am aware, any organic basis. There was observable on the legs an eczematous eruption. I directed that the chloroform liniment of the *British Pharmacopœia* should be briskly rubbed into the chest for an hour's space, if possible; and this was done daily by a very efficient attendant, who had sufficient intelligence to comprehend and carry out the treatment. Very early much relief was experienced. On the return of her physi-

gian to town at the end of three days she was already so much changed for the better that he directed the treatment to be continued. From that time it consisted in the daily repetition of the rubbing process for a month or nearly so, without aid from medicine, and with little restriction to diet. Beyond the information I received that she was daily improving, I had really little or nothing to do with her professionally after one or two visits. Under the hands of her attendant she speedily got rid of the asthma. The patient went out of town in the autumn and enjoyed perfect health and spirits. She took much walking exercise, with exposure, in the cold of the ensuing winter; and, what is very singular, two years have since elapsed with no return of the asthma.

Before giving directions as to how this treatment should be carried out, I will speak as to the *rationale*. Counter-irritation, especially by blister, issue, and moxa, are of such well-established repute in the treatment of asthma that I need not dwell on them; but, besides this, a jolting vehicle, anything that leads to displacement of the air stagnant in the viscera, is proved to give relief in many instances. I should advise, then, that the frictions should be made with such roughness as the case admits. Slight blows with the palm of the hand or the end of a towel on the ribs are quite allowable; and the friction should be extended to the front of the neck at the lower part, where the vagi enter the chest. I do not think that the composition of the liniment need trouble us, provided it be warm and work easily. Anything like Roche's embrocation would answer very well.

I am not without some experience of asthma, and I am persuaded that the present method will be found a valuable addition to our therapeutic means. If proved not to be novel, it must be conceded that it has fallen into utter neglect.

HYPOPHOSPHITES IN THE TOOTHACHE OF PREGNANCY.

Dr. Sterling believes that the toothache so common in pregnancy results from the abstraction from the blood of the salts requisite for the construction of the bones of the fetus, and accordingly recommends one and a half grains of hypophosphites of lime, soda, and manganese, daily.—*Nashville Jour. Med.*

MORPHIA AND CHLORAL.

Dr. R. H. Fisher speaks very highly of the combined use of morphia and chloral for relief of pain.—*Med. News*, July, 1872.

A SIMPLE SUBSTITUTE FOR THE POULTICE.

Apply thick wet cloths as dressing and cover with waxed paper. Greased paper answers this purpose pretty well also, and can always be readily obtained.

CARBOLIC ACID IN HYDROCELE.

In the *American Practitioner* for July, Dr. P. E. Sandidge reports a case of double hydrocele cured by

injections of two drachms of Calvert's solution of carbolic acid (No. 5), with a small quantity of water, after the failure of tincture of iodine.

POWDER STOMACHIQUE.

Take of Powdered rhubarb..... 3 grms.

Prepared chalk..... 3 "

Powdered opium 25 centigr.

Mix and divide into 12 packets.

One powder half an hour after meals.—*L'Union Médicale*.

INFANTILE PARALYSIS.

Prof. Gross ordered at the clinic for a pale, diseased stunted child suffering from infantile paralysis:—

R Tinct. ferri chloridi, f $\frac{3}{4}$ j.

Tinct. nucis vomicæ, f $\frac{3}{4}$ ij.

Hydrargyri chlorid. corrosiv., gr. iv. M.

S. Take five drops three times daily in a tablespoonful of sweetened water.

R Ung. hydrargyri, 3 iij.

Cerat. simplicis, 3 v.

Veratriæ, gr. vj. M.

S. Put a piece the size of a marrowfat pea, twice a day, over the entire spine and along the back of the limbs.

Apply the ointment gently at first, until the parts become accustomed to its use. Wash the child every day with tepid water containing a tablespoonful of common salt to the quart. After bathing, wring the end of a towel out of cold water, and with it strike the entire surface of the body quite smartly, until the skin is reddened. This treatment to be continued for a month; at the end of which time his mother was directed to bring the child back.

ENLARGED TESTICLE.

Dr. D. Hayes Agnew used the following for indolent enlargement of the testicle, supposed to be strumous.

The man was ordered to take $\frac{3}{4}$ ss. ol. morr., with gt. xv. syr. ferri iodidi after each meal; also, arsen. iodidi gr. 1-18 t. d. Locally to apply.

R Ext. bellad.,

Ung. hydrarg.,

" iodine,

" adipis, aa 3 ij. M.

If the ointment irritates the skin, it may be further diluted.—*Med. and Surg. Reporter*.

PROF. GROSS'S TREATMENT OF GOITRE.

Treatment will consist in stimulating the absorbent vessels, although the application of agents of too stimulating a character must be avoided, otherwise irritation will be produced, and the mass will be enlarged instead of diminished. The neck will be thoroughly washed at least once in the twenty-four hours with hot water and soap, and immediately afterwards a portion of the following ointment will

be applied to the surface of the tumor and well rubbed in.—

R Ung. hydrarg. biniodid..... 3 j.;
Cerat simp..... 3 vj. M.

The patient will take internally the *Liquor iodinii compositus*, gtt. viij., in sweetened water, three times daily.

A piece of thin flannel and oiled silk will be worn around the neck. The diet will be regulated and all red meats avoided. Six grains of blue mass in combination with a grain of ipecac will be given now and then at bedtime to regulate the secretions.

ASTHMA.

Dr. Hale, of Kentucky (*Khicago Medical Times*, Sept. 1872), uses the following prescription with much success, in asthmatical cases: R. Ether. sulph. $\frac{5}{8}$ iss.; Tinct. lobelia, $\frac{5}{8}$ i.; Tinct. stramonii, Tinct. opii. aa 3 iv. M. S. Teaspoonful every hour or two until relief is obtained.

MANAGEMENT OF OBSTINATE PRURITUS.

Mrs. J. G. Brown, Resident Physician, Ill. Woman's Hospital, (*Med. Exam.*, Aug. 15, 1872), speaks highly of the sulpho-carbolate of zinc in cases of obstinate pruritus of the vulva. In one particular case, the vulva, after being thoroughly bathed with tepid water, was washed twice daily with a solution of the sulpho-carbolate of zinc containing half a drachm to the ounce of distilled water, the parts being allowed to dry without wiping. She was much improved at the end of a week. During the second week the application was made once daily, on retiring at night. At the end of the third week the pruritus was wholly relieved.

BLISTERS IN PNEUMONIA.

Dr. C. J. B. Williams, in speaking of pneumonia says: "My experience has taught me to put great faith in large blisters, both in asthenic pneumonia and bronchitis, and I am confident that I have seen many lives saved by their means. Instead of being lowering they give a salutary excitement to the circulation, and the copious serous discharge which proceeds from the skin tends to relieve the congested lung without wasting the red blood, that is so necessary to sustain the functions. Small blisters tease as much as large ones, and are far inferior in the relief they afford."—*American Practitioner*.

ON THE USE OF THE BOWL DURING DELIVERY.

Dr. J. Mathews Duncan, in a paper read before the Obstetrical Society of Edinburgh, recommends the use of an ordinary wash bowl in the place of cloths for the purpose of catching the discharges which come from the vulva during labor. It has the advantage of cleanliness, is inexpensive, guards against cold by the removal of the liquor amnii, blood, meconium, and clears the air of noxious germs and decomposing animal matter; and enables the attendant to estimate the quantity and quality of

the discharges.—*Boston Medical and Surgical Journal*.

EIGHT CHILDREN DELIVERED AT ONCE.

In the *Boston Medical and Surgical Journal* for August, a case is reported in which a woman was delivered of eight children at once—all alive—three boys and five girls.

INK SPOTS may be removed from colored fabrics by a concentrated solution of sodium pyrophosphate, which dissolves the ink slowly without affecting the color of the fabric.—*Am. Journal of Pharmacy*.

ABORTIVE TREATMENT OF BOILS AND WHITLOW.

Dr. Simon de Forges (*Rev. de Therap.*) advises the topical use of camphorated spirits as an abortifacient in boils and whitlow. In the former case the boil is to be rubbed eight or ten times by the finger dipped in the alcohol. He asserts that it is rare that after this treatment a boil goes on further towards suppuration. In cases of whitlow he advises the patient to dip the finger for some ten minutes in camphorated spirits. This almost always gives great relief of the pain, and often cures the complaint.

TREATMENT OF CANCRUM ORIS.

C. S. Kittredge, M.D., of Oakland, Cal. (*The Western Lancet*), late Assistant Physician at the Nursery and Child's Hospital, Randall's Island, N. Y., publishes 19 fatal cases of this formidable affection—which is a malignant form of ulcerative stomatitis—induced in children under five years of age, predisposed to tuberculosis. The duration of this disease is from six to sixteen days, running a most rapid course when commencing in the cheek or throat, but somewhat slower in its progress when commencing in the gums. The disease demands prompt and energetic attention. He commences with the chlorate of potassa, in from five to ten grain doses every four to six hours, and continues it during the whole progress of the disease. The mouth must be frequently washed with a weak solution of liquor sodæ chlorinatae, 3 i. to water $\frac{5}{8}$ xii., and after mortification has commenced, a pledget of soft linen, wet in this solution, should be constantly kept between the sore and the adjacent tissue. Tonics and stimulants should be freely given on account of the great prostration, and iron with bark or quinine in as heavy doses as the child will bear, and strong beef tea in place of solid food. Out of 67 cases of stomatitis treated during the year, there were 19 deaths, or 28 per cent. Of the fatal cases, 12 were males and 7 females. The average age was 2 years and 11 months. In 16 cases, the primary disease was rubeola. Fourteen autopsies were made, and in every case, tubercles were found in great abundance. In 13 cases the tubercles were in the lungs, and in the other, the mesentery was filled with miliary tubercles. He remarks in conclusion that cancrum oris has a close connection with tuberculosis; and believes that it can exist only in children of a tuberculous diathesis.

PREDICTION OF SEX IN UTERO.

T. J. Hatton, M.D., Resident Physician to Long Island College Hospital, (*New York Medical Journal*, July, 1872), in substantiating the assertion advanced by Tyler Smith and others, that not only a pregnancy, in its advanced stages, be determined by auscultation, but also the presentation, position and sex of the foetus *in utero*,—submits the following essential points from the clinical records of seven cases as a proof of the practicability and reliability of this rule: Foetal pulsations, heard below a horizontal line, dividing the uterus into two equal parts, note vertex presentation; above it, breech presentation; below it, and to the right, second position. When the foetal pulsations number 144 per minute, is a female; 124 per minute, male. As deviations from this rule, or average, will doubtless be encountered, he ventures to add that a variation of six beats per minute, from 124 upward or from 144 downward, will not endanger a diagnosis, provided auscultation be practised in the *ninth month of pregnancy*. In his cases this rule was the sole guide, and without a single failure.

INCONTINENCE OF URINE IN CHILDREN.

Mr. Holmes Coote recommends for this intractable affection the administration of creosote in one-grain doses, three times daily, combined with assaetida and rhubarb pill, of each two grains.

RECIPE FOR PREPARING BEEF-TEA AND SOUP FOR THE SICK.

Make the cook understand that the virtue of beef-tea is to contain all the contents and flavors of lean beef in a dilute form; and its vices are to be sticky and strong, and to set in too hard a jelly when cold.

When she understands this, let her take half a pound of fresh-killed beef for every pint of tea she wants, and carefully remove all fat, sinew, veins, and bone. Let it be cut up into pieces under an inch square, and set to soak for twelve hours in one-third of the water required to be made into tea. Then let the meat be taken out, and simmered for three hours in the remaining two-thirds of water, the quantity lost by evaporation being replaced from time to time. The boiling liquor is then to be poured on the cold liquors in which the meat was soaked. The solid meat is to be dried, pounded in a mortar, and minced so as to cut up all strings in it, and mixed with the liquid.

When the beef-tea is made daily, it is convenient to use one day's boiled meat for the next day's tea, so that it has time to dry and is easiest pounded.

Some persons find it more palatable for a clove of garlic being rubbed on the spoon with which the soup is stirred. I prefer a bit of celery heated in oil. Good soup is that which is most like this beef-tea, and is a very digestible article; bad soup, that which least resembles it, is to be avoided as poison.—*Chambers on "Indigestion."*

ALCOHOLIC PARAPLEGIA.

Dr. Wilks, of Guy's, in a paper in the *Lancet*, endorses the conclusions lately published by Dr. Handfield Jones, in reference to the production of epilepsy and other nervous diseases by the abuse of alcohol. Dr. Wilks has met with cases where the alcohol, acting chiefly on the spinal chord, made paralysis the leading symptom, and he combats in his own trenchant style the notion that it is not safe to suddenly leave off the accustomed stimulus. "No harm," he says, "but only good will ensue from its withdrawal." He considers that the same rule should apply to all persons.

Some striking cases are mentioned, in which the absolute and instant withdrawal of alcohol snatched the patients from the very jaws of death. One was a professional man, who, after drinking hard, became so ill that he took to his bed, had epileptiform attacks, ate nothing, and was constantly retching, his wife standing over him administering brandy and champagne from time to time to keep him alive a little longer. Dr. Wilks succeeded, after several attempts, in inducing his wife and two medical attendants to stop every drop of alcohol. When this was done the patient soon cried out for drink; but, after imploring in vain for some time, he was violently sick, and then sank into a sound sleep. Upon waking he took a little beef tea, in a few hours ate some solid food, and within a week was back again in his practice.

The purport of Dr. Wilks' paper is to draw attention to the fact of paralysis, occurring as a result of alcoholism; and therefore that when a medical man is called in to see a case of this kind, he should remember intemperance in drinking as a possible cause, just as he would if he found an enlarged liver.

If the affection should turn out to be in any way peculiar in its pathology, it will certainly deserve a distinct appellation; but even should the morbid changes in the cord, together with the resulting symptoms, resemble what is seen in other forms of paralysis, he would still recommend the adoption of such a term as alcoholic paralysis as significant of its cause, for we are warranted in so doing by the use of the expression puerperal, syphilitic, or uræmic epilepsy (eclampsia) in reference to the origin of the fits when arising under special circumstances.

CARBUNCLE AND BOILS TREATED WITH NITRATE OF SILVER.

In both the forms of anthrax—carbuncle and boil—the application of the solid nitrate of silver affords the most speedy means of cure. One looks back, with feelings almost akin to horror, at the heroic plan of treating carbuncles, sometimes enormous in their size, by crucial incisions; cases, too, occur to one's memory in which, in spite of this operative procedure, the carbuncle still went on increasing in size; where, in fact, the incisions not only did no good, but positively did harm, by the shock to the patient and the increased risk of pyæmia. A lecture upon this subject by Sir James Paget,

appeared in the *Lancet*, Jan. 16, 1869, it which he strongly condemned this mode of treatment.

The treatment he recommends is at first a piece of emplastrum plumbi with a hole in the centre; then resin cerate on lint, covered over with a large poultice (half linseed and half bread); and then, later, the careful application of carbolie acid lotion, or some other deodorizing fluid. With these measures must, of course, be combined cleanliness, fresh air, and a careful regulation of diet.

I have found, however, that the duration of carbuncle is very materially diminished, and its extension cut short, by preceding this treatment by the application of nitrate of silver freely over its surface, repeated, if necessary, once or twice after intervals of two days. Immediately after the application, a small soft pad of dry lint is applied and retained by means of a piece of strapping and a bandage. The after-treatment is the same as Sir James Paget recommends, except that the poultice will be unnecessary, and the internal administration of iron or other tonic will generally be found useful.

Boils are treated in the same way, and will seldom require a second application of the caustic.

The *modus operandi* of the application of nitrate of silver in these cases seems to be the energetic stimulation, and consequent contraction, of the capillaries and small arteries of the part, whereby engorgement is diminished, the vessels are placed in a condition for returning to a healthy function, and morbid exudation is diminished, arrested and removed.—*London Practitioner*.

INTERNAL HÆMORRHOIDS TREATED WITHOUT OPERATION.

During the last year, Dr. John Beekman treated at the New York Dispensary eleven cases of internal hæmorrhoids, all occurring in females, and all treated without operation. In every case, the only internal medication consisted in the following formula:

℞ Pulv. sennæ,
Potass. bitartrat.,
Pulv. sulphuris.....aa 2 oz.
Pulv. zinziberis..... ½ oz. M.

This preparation is designated in the Dispensary Pharmacopœia as *Pulvis Sennæ Compositus*. The dose, as employed by Beekman, was a teaspoonful of the powder, in molasses, every morning. The local treatment consisted in the use of the following ointment:

℞ Ext. Belladonnæ,
Plumbi acetatis.....aa 2 dr.
Acid tannic..... ½ oz.
Ung. adipis..... q. s.
Ut fiat unguentum.

A small mass of the ointment to be introduced within the anus thrice daily, after a thorough ablution of the parts with cold water.

The duration of the treatment was quite various, bearing a direct ratio to the severity of the case, ranging from a week to about five weeks. As far as could be ascertained, recovery took place in every

instance, and no case of relapse has thus far come to Dr. Beekman's notice. A few of these patients suffered from hæmorrhage, but not to an excessive amount. Instead of the ointment above mentioned Dr. Beekman uses, in private practice, suppositories made up of the same ingredients, with the exception that cocoa butter is substituted for the simple ointment—each suppository containing two grains each of the extract of belladonna and acetate of lead, with four grains of tannin.—*Medical Archives*.

COLD-WATER TREATMENT OF TYPHOID FEVER.

Dr. E. Scholz, it is stated (*Deutsches Archiv f. Klin. Med.* ix.), since the year of 1868, when he introduced the cold-water treatment of typhoid fever into the Bremen Hospital, has treated 125 patients—82 men and 43 females—the majority of whom were aged between 15 and 30 years. Of these cases, five, or about four per cent., terminated fatally. The temperature of the cold baths into which the patients were immersed varied from 8° to 16° R., according to the season of the year, and according as the medium temperature of the patient's body throughout the day exceeded or fell short of 39° C. In severe cases, in addition to the cold bath, cold applications were made to the chest, and over the abdomen. The leading circumstance which, according to Dr. Scholz, contraindicates the employment of cold baths, is the occurrence in any case of intestinal hæmorrhage, because of the necessity of the patient being then kept in perfect quietude; but even in such cases the application alone of ice to the abdomen will be found beneficial, and may be continued until the debilitating effects from the loss of blood are recovered from. It may also be remarked that the cold bath is inadmissible in those rare cases where the fever attacks individuals of broken-down constitutions, drunkards especially, and the temperature of whose bodies continues depressed, seldom rising to 39° C. Dr. Scholz relates a case of this kind, in a girl 19 years old, who was destroyed by the cold bath. She was affected with emphysema of the lungs.

The statements of Dr. Scholz as to the beneficial soothing influence of the cold water treatment in typhoid fever upon the functional nervous centres, and upon the digestive and cutaneous systems, are fully borne out by the history of the cases that were subjected to it. It is said by Dr. Scholz, that of five cases attended with intestinal hæmorrhage in which the remedy employed was the liq. ferri sesquisulph., only one terminated fatally. In some severe cases of the fever, occurring mostly in delicate females, on the eighth or tenth day of convalescence there was experienced severe dental hyperæsthesia.—*Centralblatt f. d. Med. Wissenschaften*, February 24, 1872.

COLD WATER TREATMENT OF ABDOMINAL TYPHUS IN THE ROYAL JULIUS HOSPITAL AT WURZBURG, DURING THE YEARS 1870-71.

Dr. F. Riegel states in the (*Deutsche Archiv f. Klin. Med.*, ix., 1871), that the cold-water treatment of abdominal typhus was marked by considerable mildness. The temperature of the "half

aths" which were employed, was 20 R., hence the patients were enabled to remain in them for ten minutes at a time, without experiencing any special inconvenience. They would often, as they lay in bed, take a shower bath of cold water. These baths were continued until a temperature of 39.5° was attained. In the intervals between the baths, cold compresses were applied over the abdomen. These were found to be preferable to bladders filled with ice, the latter from the powerful impression they made, caused immediately an extreme contraction of the peripheral bloodvessels, so that the cooling effect caused by the diminished circulation at the surface of the body was, it is probable, productive of injury rather than of good.

Of one hundred and fifty-six typhoid patients treated during the years 1870-71, in the hospital—including only the well-marked severe cases—only seven proved fatal; while in former years, before the adoption of the cold water treatment, in the same hospital, the mortality among the typhoid cases reached 20 per cent.

It was observed by Jurgensen and Hagenback, so, so, by Dr. Riegel, that in his typhoid patients, very often there occurred a severe burning pain in the soles of the feet, so that there appeared to be a connection between this system and the cold water treatment. Intestinal hemorrhage was of less frequent occurrence than under the former expectant treatment. It is here, perhaps, that is shown the beneficial action of this mode of treatment.—*Centralblatt f. d. Med. Wissenschaften*, No. 27, 1872.

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ARTIFICIAL LIMBS.

By request we lately visited the Victoria Drug and Truss Factory, Victoria Square, Montreal, to inspect some specimens of artificial legs and arms, manufactured by Dr. Eneas, after the patent of Mr. Wendell, of New York. We confess to have the very highest opinion of these limbs, several of our friends having made use of them and experienced from them comfort and ease which was hardly to have been anticipated. Both the arm and the leg are extremely light, the former not exceeding, we should judge, a pound and a-half, while the latter is about five pounds, a matter of no small importance. In arrangement they are simple, efficient and very ingenious, yet of sufficient strength to be able to withstand

even more than the ordinary wear and tear which is likely to follow work imposed upon an artificial extremity. The arm is especially ingenious in construction, enabling as it does, the wearer to do a variety of things which, with other artificial arms which we have seen, was impossible. A gentleman in Montreal has had one of them on for several years, and states that he is able to write a fair hand, dust his coat, cut his meat, carve, drive, and do a hundred other little things, some, perhaps, of no very great importance, but all of which tend to make one's life more pleasant. We understand that Dr. Eneas has arranged with the patentee, so as to allow him to manufacture them in Montreal. Our friends throughout the country who may have patients in need of either limbs or arms, would do well to note the contents of this article and communicate with Dr. Eneas, the proprietor of the Victoria Truss Factory, where there is constantly on hand, and made to order, every kind of surgical appliance.

PROFESSIONAL REMUNERATION.

We honestly believe that, as a rule, there is no class men, so poorly recompensed for services rendered as the profession of which we are a member. When one thinks of the years passed in preparatory training, before entering upon the purely professional part of our education, and the time occupied in the acquisition of the latter, it is but right to assume that as the profession is a liberal one and deals with the lives of the human family, a remuneration commensurate with the importance of services rendered, will, at all events, be the reward. Twenty-two years ago, when the tariff, which at present is followed by the large majority of the profession in Montreal, was adopted it was possible when one obtained a fair practice, not only to live comfortably upon it, but likewise put past a little for a rainy day. Now, such a thing is impossible. It is not then to be wondered at that the question of professional remuneration is strongly forcing itself upon the attention of the Medical profession throughout the entire length of the Dominion. The rapid rise which has taken place in every necessary of life, not to say anything of the increased price demanded for surgical instruments and medicines, is an ample reason why a revision of the tariff already alluded to should be made. We are glad, therefore, to know that in Montreal, after a great deal of work and enquiry, a Committee have named an increased scale, and that it is quite possible that within this month their report will be brought before the Medico Chirurgical Society of

Montreal for discussion. We earnestly hope that in this matter there will be union, and especially that the seniors of the profession will not hold out on the old tariff and claim their right to charge as they please. If this doctrine, which we have heard more than once broached, is admitted, it cannot be confined to the question of fees, and the *cordon* that keeps the profession united will be loose indeed. This is a matter of really far more moment than would appear upon the surface, and to the younger members of the profession it is of vital importance.

TO OUR SUBSCRIBERS.

We sent in our last number accounts to all our city subscribers, and in the present issue, we enclose bills to our country subscribers. We will take it kind if both will promptly attend to the small memorandum.

PERSONAL.

Dr. Trenholme of Montreal, professor of midwifery and diseases of women and children, in Bishops College, has been elected a Fellow of the Obstetrical Society of London.

Mr. Holmes Coote, the eminent London surgeon, has been obliged to desist from all professional duties, owing to continued ill health.

Mr. G. B. Shaw has been selected by his fellow students to deliver the valedictory address upon behalf of the graduating class, at the convocation of the Medical Faculty of Bishops College, on April next

Reviews.

A PRACTICAL TREATISE ON URINARY AND RENAL DISEASES, INCLUDING URINARY DEPOSITS.—Illustrated by numerous cases and engravings, by William Roberts, M.D., Fellow of the Royal College of Physicians, London; Physician to the Manchester Royal Infirmary; Lecturer on Medicine in the Manchester School of Medicine. Second American from the second revised and considerably enlarged London edition. Philadelphia, Henry C. Lea, 1872. Montreal, Dawson, Brothers.

It has been said, that excessive book-making is one of the evils of the present age. The assertion is quite true of too many of the books that are presented to us. We have no such opinion of the work before us by the accomplished Lecturer on Medicine in the Manchester School. It belongs to a type of authorship, which we wish, for the sake of the busy

practitioner, were much more common than it is. This is the American reprint from the second English edition of Dr. Robert's work, the first having been brought out in 1865, and exhausted three years ago.

Our author divides his work into three parts. In the first part, the Physical and Chemical Properties (including urinary deposits) of the urine in health and disease, are treated of. In his treatment of this division of the subject, Dr. Roberts displays good judgment, for while all those chemical researches into the composition of the urine, and the rate of excretion of its several ingredients, which have been proved to be of clinical value, are amply elucidated the reader is referred to such treatises as those of Parkes, Vogel and Neubauer, for the more purely chemical and physiological investigations in this line which have not as yet been shown to be of practical value. The various methods of examining the urine for clinical purposes are given, and the significance of its many and diverse changes are amply explained and illustrated. Dr. Roberts describes a very convenient form of arrangement for keeping the necessary apparatus for testing the urine. It consists of a circular stand somewhat after the manner of a cruet-stand, on which are arranged in two tiers the various reagents, glasses, test-tubes, burette flask, urinometer stirring rods, pipettes, &c. This part of the work is amply illustrated with engravings of the microscopical appearances of the various deposits to be found in the urine. These are compared with, and distinguished from the numerous extraneous matters which accidentally find their way into it.

In the second part of the work, those diseases in which the chief characteristic is an alteration of the composition of the urine, are treated of under this head. Diabetes Insipidus, Diabetes Mellitus, Gravel and Calculus, and Chylous urine each receive their share of attention. Dr. Roberts has come to no definite conclusion, and framed no theory and as to the pathology of Diabetes Mellitus. The following are the words with which he concludes this part of his subject: "Although we appear to be approaching an exact knowledge of the pathogenetic elements of glycosuria, it is yet manifestly impossible in the present state of science, to frame a comprehensive and clear theory of diabetes. It would seem highly probable that diabetes consists proximately in some disturbance of the destiny and functions of the amyloid substance (animal dextrine) of the liver. But this disturbance may be due originally to disease far away from the liver itself, in some part

the nervous circle which controls this function. Occasionally, as in traumatic cases, it is possible to place the finger on the primary lesions; but in the immense majority of cases, we are left in a sea of conjecture. Further researches, conducted in the light of past and future physiological discoveries, can alone reduce these conjectures to order and certainty."

With regard to the treatment of Diabetes Mellitus our author is a firm believer in the efficacy, as a palliative and in some cases curative measure, of a restricted diet from which starch and sugar are rigidly excluded, and is of opinion that the discredit into which this method of treatment has come in some quarters is due to the slovenly and incomplete manner in which it was carried out.

Dr. Roberts' experience of the skimmed milk treatment as proposed by Dr. Donkin, is decidedly unfavorable. His verdict with regard to the rennet and pepsine treatment is also unfavorable.

Opium is the only drug which has seemed to him to be of any service, its good effects seeming to be due, not to its direct influence on the course of the disease, but to its anodyne properties. He says: "If no restriction be placed on the diet, opium in doses of from 6 to 20 grains a day, has always in my experience had the power of reducing the flow of the urine by about one half; that is to say of bringing it down to five or eight pints, and this without increasing its density. But notwithstanding this amelioration in the state of the urine, the downward progress of the disease is not arrested, and the effect of the drug seems attributable to its deadening influence on the appetite rather than to its specific power of checking the formation of sugar. When opium was given to patients under a restricted diet, it did not in my hands exhibit the least power of lessening the flow of urine or the excretion of sugar. Its value depends on its power of inducing sleep, and of allaying the dolorous sensations and irritability which constantly torment diabetic patients." Dr. Roberts has seen no good effects from peroxide of hydrogen, or ozonic ether.

Dr. Roberts makes no mention of a method of treatment which we should like to see tried in this disease, viz., the use of electricity. The more than suspected nervous origin of the disease, together with the fact that glycosuria has been induced by injury to the base of the brain, and that in many cases where no traumatic origin of the disease is known, degenerative changes are found post mortem in the pons varolii and medulla oblongata, would seem to warrant a trial of this powerful therapeutic agent in

the diseases of the nervous system. The application of the constant current of medium intensity to the brain and spinal cord, especially its upper part, and to the sympathetic and pneumogastric nerves would seem to be the form of electricity most likely to be useful. Experience is the best and perhaps only reliable test of the usefulness of these suggestions. *Semmola* has found both temporary and permanent results from faradization and galvanization of the pneumogastric nerves. In some of the cases both the quantity of urine and sugar were diminished. It is, however, to be remarked that it would be difficult to galvanize the pneumogastric without also affecting the sympathetic.

In the third part of the work organic diseases of the kidneys are discussed at full length and in a very able and impartial manner. The subjects treated of are Bright's disease, acute and chronic. Suppuration in the Kidney, Pyelitis Pyonephrosis, Concretions in the kidneys, Hydronephrosis, Cysts and Cystic Degeneration of the kidney, Cancer, Tubercle, Benign Growths and Entozoa. There is a concluding chapter on anomalies in form, position and number of the kidneys.

A capital feature of this book, and one which makes it especially valuable to the practical physician is the large number of illustrative cases which are interspersed with the descriptions of the various diseases treated of. We are glad to see that this plan of introducing cases is becoming much more general than it used to be with writers on medical subjects. This is a notable feature in the articles of some of the writers in *Reynold's System of Medicine*.

In conclusion, we can heartily recommend Dr. Roberts' work to our readers, as one which they will read with both profit and pleasure. For the publishers we have no words but those of commendation. The book is well bound, the paper good, and the impression of the type admirably clear.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF WOMEN, INCLUDING THE DIAGNOSIS OF PREGNANCY. By Graily Hewitt, M.D., London, F.R.C.P., Professor of Midwifery and diseases of Women, University College, and Obstetric Physician to the Hospital; Honorary Fellow of the Obstet. Soc. of Berlin; Vice President of the Obstet. Soc. of London, Philadelphia Lindsay & Blackiston; Montreal, Dawson Brothers.

The third edition of this admirable work now lies before us, and after perusal, we find in it a great improvement on its predecessors as regards the general

arrangement of the work. As might be expected from the increased experience of its author and the abundant opportunities afforded him, much new matter has been added to the present volume. The arrangement has been, to some extent, altered, and these alterations are to be commended, as thereby the usefulness of the work is greatly increased. Twenty new illustrations have been added, which being mostly original, will greatly facilitate the study of many difficult questions of Gynecology. On certain points upon which there are still considerable differences of opinion, the author has expressed himself somewhat decidedly. At the present time great attention is paid to the mechanical means of relieving uterine disorders, and Dr. Hewitt is one of the strongest advocates of that system, regarding it as more than a mere speculative theory. In his preface he states that it commends itself to his judgment as true, as he has found it to be in conformity with daily observations for the past 5 or 6 years, and, therefore, feels himself warranted in giving so decided a public expression to his views. With the exception of uterine growths, Dr. Hewitt believes all other conditions are, in some way or other, caused by, or in connection with some form of displacement, for he states that certain alterations in the form of the uterus, such as are called flexions, are often the cause of inflammation instead of the inflammation being itself the starting point of these uterine conditions.

In the diagnosis of the various uterine disorders, great attention has been paid. Dr. Hewitt has endeavoured to render this easy of accomplishment, for his descriptions and symptoms of disease are as carefully and minutely rendered as to at once become apparent as the work of a diligent and painstaking observer.

In the treatment of the pedicle, after ovariectomy, (of which operation he records ten successful cases out of fifteen) he has devised what he considers an improvement on the buckle clamp. This consists of a No. 4 ring pessary bent into a proper shape, which can be adjusted and altered to suit the requirements of each case, and which in the future he intends to use exclusively in all cases where the pedicle is brought to the surface.

Space will not allow us to enlarge further upon the different sections of this work. We recommend it to all, as it treats of a class of diseases unfortunately too common, and which do not receive that attention from the profession generally that their importance and connection with other disorders should demand. This probably is due in a great measure to the delicacy of the sex; for in many

cases they wilfully mislead, so that the attention of the practitioner is not specially directed to the true cause. As it is necessary for all obstetricians to be master of these conditions we advise them to obtain this work, emanating as it does from the pen of one who is a thorough master of his subject.

The work is published by Lindsay & Blakiston, of Philadelphia; in Montreal by Dawson Brothers. It is excellently got up, and contains about 730 pages of reading matter.

Medical Items and News.

REMEDY FOR CATARRH.

The German correspondent of the *Chemist and Druggist*, writing from Dresden, notices from Dresden, notices a new remedy for that most annoying of complaints—a cold in the head. The application has been found very successful, and is very simple and not unpleasant to the patient. It is prepared in the following manner:—

A wide-mouth glass bottle is filled with amianth, or, better, with cotton, and then the following mixture is poured on, so that the cotton or amianth is perfectly saturated with it.

Acid carbolie puris, 80 grs.

Liq. amon. caustic, 96 grs.

Spts. vini rect., 80 grs.

Aq. distillat, 40 grs.

The vapours are drawn into the nose frequently during the day, and now and then inhaled into the mouth.

J. P.

The London *Lancet*, that attempted to be witty at our expense, has recently shown its correct knowledge of Canada, by speaking of "*the Province of Toronto*."

There are six hundred and forty-three medical students attending the classes of the University and College of Surgeons in Edinburgh, this year.

DIED.

At St. John, N.B., on the 11th September, 1872, R. Hamilton Livingstone, M.D., aged 30 years.

At London, England, on the 1st October, from facial carbuncle, James Chatterton, M.D., Assistant Surgeon, 2nd Battalion Scot's Fusileer Guards, aged 28 years. The deceased served in Canada during the latter part of 1869-70, taking part in the Red River Expedition, and was gazetted to the Guards on his return to England. His many friends in Canada, deeply lament the premature death of one so full of promise.

At Cheltenham, England, on the 15th October, 1872, John Gardner, F.R.C.S., E., aged 82 years, Assistant Surgeon in the Grenadier Guards at the battle of Waterloo.

Printed by JOHN LOVELL, Nos. 23 and 25 St. Nicholas St., Montreal.

Original Communications.

Removal of Tongue and Lower Jaw. By WILLIAM H. HINGSTON, M.D., L.R.C.S.E., Surgeon St. Patrick's Department Hotel Dieu Hospital, &c.

There are occasions when surgeons, in the exercise of their oft-times anxious functions, hesitate between allowing a patient to linger a few suffering months upon the earth, or attempting, even at the risk of cutting short existence by a hazardous and most formidable operation, to arrest the progress of a fearful malady, relieve suffering and prolong life. Such an alternative presented itself to me early in October last, and, although, at the time, I shrunk from employing the knife, the result has proved, in a conclusive manner, the advisability of the procedure adopted.

An old man, William Murphy, æt. 71, presented himself at the hospital in October, 1872. His general appearance was that of health; his countenance open; his complexion florid; his eye clear; his skin soft and ruddy. On a casual glance he had all the appearance of a hale, hearty, fresh old age. Yet, on closer inspection, an ugly-looking cancerous mass was visible through the ever half-open mouth, involving the whole sublingual region; extending along the lower jaw from a little beyond the median line on the right side to the second molar tooth on the left; and eating away, in its progress upwards, the frænum and a considerable portion of the under surface of the tongue. This large open cancerous surface emitted an odor of a most offensive nature. The movements of the tongue were much interfered with, and speech, as a consequence, was indistinct. Deglutition was painful and difficult; and pain, of a severe lancinating character, troubled him by day, and disturbed his rest by night. He told me he had noticed a small pimple under his tongue in June last, which had been treated for some time by a neighboring practitioner, who recognized its true character and suggested the patient's going to New York or Montreal, to have its removal undertaken. After some time he directed his steps hither, and placed himself under my care. On a careful examination of the extent to which the structures were involved, I told him the disease had so extended as to render necessary the removal of the greater part of the lower jaw and the whole of the tongue. He said he was prepared to submit to the removal of the jaw, but he could not suffer loss of his tongue; and urged me to remove the jaw, and take from the tongue whatever seemed to be diseased. But, believing, as I do,

that partial removal of the tongue for malignant disease is objectionable, I was forced to decline even a compromise "whereby the original constitution and frame, as from the Maker's hand, as Sir William Ferguson expresses it, may be kept as nearly as possible in its normal condition." The patient then left the hospital. I cannot say I regretted his departure. Three days afterwards, he returned, and urged me to proceed at once to the operation as I had proposed. Having explained to my patient the full extent and nature of the operative procedure; its immediate risk; its subsequent danger; its, perhaps, only temporary relief; the inconvenience to him of being thus mutilated; the loss of speech and of the power of mastication, I met with the same reply: "If I recover, I'll be better without this thing; and, if I die—thank God I am prepared for that too." Never, during my professional experience, did I see a patient submit more cheerfully or courageously to an operation, the result of which neither of us could predict. And if, among the conditions favorable for operation, a tranquil, cheerful and hopeful disposition finds a foremost place, then would the patient in question, I was satisfied, withstand a mutilating which to most others of his years would be fatal. Finding him in this cheerful frame of mind, I supported it by kind and sympathetic encouragement. My own was strengthened by my colleagues who were not opposed to the operation (Drs. Beaubien, Munro and Rottot,) who subsequently afforded me valuable assistance at the operation. I also had the advantage of the valuable opinions of Mr. Gascoyne, of St. Mary's Hospital, London, and of Dr. Fenwick, who happened to visit the hospital at the time, both of whom considered the case to be one where an operation was justifiable.

On the 27th October I performed the operation thus: Patient being placed under chloroform, with his neck well raised and head thrown back, I made a vertical incision, in the median line, through the lower lip, across the chin to the hyoid bone; an other at right angles to the former along the lower margin of the body of the inferior maxilla to the ramus; and a third, similar in direction, but of less extent, on the right side. The cheeks were separated from the jaw along the whole extent on both sides, and with them the levator menti, depressor labii inf., dep. anguli oris, and platysma myoides as far as the anterior margin of the masseter muscle on the left side, and the mental foramen on the right. The knife was then passed within the jaw and made to sweep along close to the bone, the genio glossi and hyodei, genio hyoglossi, mylo hyodei and digastrici

were divided, after a piece of twine, previously passed through the tongue, had been intrusted to an assistant. The bone was then sawed through, on the left side, at the ramus, and on the right, at the mental foramen.

The tongue now engaged attention. Drawn well forward with the cord through its tip, I divided its substance and investing mucous membrane at its base, passed the chain of the *ecraseur* through the aperture, and separated the *hyoglossus* and *genio hyoglossus* of the left side. Notwithstanding the employment of the *ecraseur*, blood spouted from the lingual artery, but was readily arrested by a ligature.* The chain was then used in the same way on the right side. The advantage of dividing one side at a time was evident. Blood spouted from both linguals as if they had been cut with the knife, but hæmorrhage was arrested in one before the other was severed. The *stylo glossi* with any *debris* of mucous membrane were divided with the knife, and the tongue was removed. There was very little loss of blood at the time and not much oozing afterwards. The soft parts were brought into close approximation by interrupted sutures at short distances, and sufficient dry lint was inserted to keep the lower lip, chin and cheek from falling in. The patient was then placed in a prone position in bed. A couple of hours afterwards I proceeded to feed him. On opening his mouth, and on looking across the floor of lint, the whole epiglottis, from its broad rounded upper extremity to its narrow thyroidean attachment, could be seen with ease. It stood almost erect, like a watchful sentinel, bending slightly, as is usual in ordinary respiration, over the aperture whose function it is to guard and protect. The elastic feeding tube attached to the stomach pump, pressing against the epiglottis, gave no trouble, produced no spasm, no effort at coughing, no resentment of any kind, but it permitted itself to be handled as if dispossessed of sensibility altogether.

The patient made a surprisingly rapid recovery. Union took place throughout the whole extent of the horizontal wounds, and throughout all but the most dependent part of the vertical incision, by first intention. The two ligatures came away on the ninth day, and on the day, after he left the hospital, cheerful and happy, for his home near Rouse's Point.

Four months have now elapsed, and so far there is no appearance of a return of the fell disease for

the removal of which the patient had submitted to the knife and saw.

He came to Montreal yesterday, at my request. He presents a healthy appearance, swallows without difficulty, and evidently to good purpose, as his well-conditioned state attests.

That you may see the inconsiderable deformity which now remains, and hear to what extent speech is restored, notwithstanding the entire ablation of the chief organ which gives it articulate utterance, the patient is now before you.

Linden Place,

Union Avenue.

February 7, 1873.

Case of Acute Purpura, by FRANCIS WAYLAND CAMPBELL, M. D. L. R. C. P. Lond., Professor of Physiology, University of Bishop's College.

On the 10th of January of the present year, about five o'clock in the afternoon, I was called to Mrs. A——, a lady of good social position, in labor with her sixth child—the fourth under my care. The labor progressed satisfactorily, and about half-past seven a large female child was born. The infant was to every outward appearance, in perfect health, cried fairly loud, and when given into the nurse's arms promised to do well. The funis, however attracted my attention, from its singular shape and strange color: from end to end it was as regular a corkscrew as it is possible to conceive, and so black as to suggest the idea of putrescence, yet it was firm and elastic to the touch. The blood which escaped when the cord was divided, was exceedingly dark, as was that from the mother, and the blood from the mother showed little attempt at coagulation. The uterus contracted well, and after seeing the child washed and dressed, I left. On the following day (11th) both at morning and evening visit, everything was satisfactory, the child had eagerly taken the breast, which contained a good supply of milk.

On Sunday, the 12th, when I made the visit in the forenoon, I was informed that, during the night, the child had bled freely from the nose, and soiled handkerchiefs produced, proved the truth of the assertion. On examining the child I found still some oozing from the nose, while the skin which, was of a dusky hue, was covered with small petechial spots—on the face and head they were particularly large. The child still took the breast readily, and the bowels had moved freely, and were of a healthy color. I ordered one drop of the *muriate tincture* of iron every two hours, and left a solution of tannin to brush the inside of the nose with, should severe

* The third or fourth time only I have used the ligature in six years, accupressure having always sufficed.

hæmorrhage set in. At the afternoon visit, I found that the child would not retain the iron, on the stomach, so reduced the dose to half a drop every hour. Hæmorrhage had again recurred from the nose, and the gums were bleeding freely, having commenced when the child was at the breast. Upon examining them, I discovered two teeth in the lower jaw—one partly through the gum, the other nearly through. The bleeding could not be located to any particular spot, but seemed more like oozing from the entire surface. Very small doses of tea and brandy were ordered.

At 7 p.m., there was not any improvement; hæmorrhage still recurring, and patecheal spots are larger and more numerous. Was obliged to discontinue the iron, as even in doses of half a drop, the stomach would not bear it. Although the child still took the breast, it was showing evident signs of weakness.

1 a.m. Blood is coming from nose and mouth, and there is considerable oozing from the tip of the right ear, and from the left meatus; stools are bloody in character; skin almost livid; and the child is evidently sinking. This condition of matters continued all the night, and a few minutes before my morning visit the little thing died, evidently from exhaustion.

I have called it a case of acute purpura; for it seems to me to bear all the characters which we would associate with an acute attack of purpura hæmorrhagica, and is exceedingly interesting to me, as I have been unable to find in any work upon diseases of children, any record or any description of a similar case. The history of the mother, as regards her mode of living, points towards the diagnosis I have made, as she informs me that during the four last months of her pregnancy, she very seldom tasted animal food.

The mother made a remarkably good recovery, being up on the tenth day, without a single untoward circumstance having occurred.

Two years and a half in a London General Hospital. By G. F. SLACK, member of the Royal College of Surgeons, London, late House Surgeon Charing Cross Hospital.

(Number three.)

The first surgeon in England, who performed the difficult operation of excision of the ankle-joint, was Henry Hancock, senior surgeon of Charing Cross Hospital, and President of the Royal College of Surgeons, London. In a course of lectures delivered

some years ago before the Royal College of Surgeons, he explained his mode of performing this operation, the success he had achieved, as well as his ideas after many years experience on the different operations upon the foot. His plan of excising the ankle-joint is as follows: Lay the foot on its inner side; make an incision along the posterior border of the lower end of the fibula, passing below the malleolus and curving slightly forwards for about three inches; the fibula is then divided by cutting pliers about two inches up and the lower part carefully dissected out. In the next step of the operation turn the foot on its outer side and make a similar curved incision around the inner malleolus, keeping the knife close to the bone, then carefully divide the internal lateral ligament. By turning the foot outwards the upper part of the astragalus can be sawn off. The lower end of the tibia is removed by introducing a narrow-bladed saw, being careful not to cut too far, on account of the structures lying behind. The external wound is brought together with sutures, leaving an opening for discharge. The limb is then bandaged to a back splint with foot-piece. Additional steadiness may be attained by the use of side-splints fastened to the back-splints with straps. Lint soaked in a solution of carbolic acid forms the usual dressing, for a time at any rate. Cases, where this operation is called for, do not often occur, but when they do they are very successful if proper care and attention is shewn in the after treatment. It is seldom that the disease is limited to the lower end of the tibia and upper part of the astragalus, the whole of the latter bone being usually implicated. In persons of a scrofulous constitution, excision of this joint will prove even less successful than of the hip, and excision of the hip in such cases can hardly be called a successful operation. The following case is a good instance:—

A man of decidedly scrofulous constitution, thirty-five years of age, formerly a sailor until disabled by disease of ankle-joint, was admitted with a view to operation. Eight years before he had fallen and sprained his ankle; since that time it had gradually gone on from bad to worse, until he was unable to put his foot to the ground. The tissues about the joint were very much thickened and of a dusky red hue. There was an opening on the outer side of the joint, which discharged freely. No pain, general enlargement of glands about the body, slight cough. The joint was excised in the manner described above. For two months the case went on remarkably well, the swelling subsiding, the discharge decreasing. From this time, however, slowly but surely, the limb began to assume the same appearance it pre-

sented before operation, so that at the end of two months more the poor man was no nearer recovery than when he entered the hospital. For such a case there is but one alternative, amputation. A case where the operation was successful will appear in another paper, in which I mean to give a short account of a few selected cases where the great benefit to be derived from carbolic acid will be shewn. The immense advantage obtained by saving the foot, even with a stiff ankle, should always incline the surgeon to give this operation the benefit of any doubt that may exist, as to the chances of a recovery. The constitutional disturbance and consequent exhaustion is not so great in disease of this joint as in the hip or knee, so that an attempt to save the foot by excision, is in all cases justifiable, because if it is not successful the patient has sufficient strength to undergo amputation.

Disease of the shoulder joints is not so frequent as disease of joints of lower extremity, and when it does occur is more amenable to treatment, owing to the fact that perfect rest may be given to the joint, and at the same time the general health be maintained by out-door exercise.

The three following cases are interesting :

1. A London postman, aged 40, thin and delicate, was admitted with his right shoulder joint in the following condition : Very little power of motion, slight pain on attempting to rotate the arm, an opening on the inner side of the deltoid from which there was considerable discharge ; had performed his duties as postman, although his shoulder had been in that state some time.

The treatment pursued for upwards of two months was as follows :

The arm was bound firmly to the side ; every morning a solution of sulphurous acid was injected into the opening. He was allowed 2 pints of beer, 4 ozs. of brandy, plenty of meat, potatoes, bread and butter, etc., and a pint of beef tea or milk, as his diet for each day. Iron, cod liver oil and nitro-muriatic acid were giving in gradually increasing doses. Every fine day he was obliged to spend a couple of hours walking about the parks. After about a month of this treatment, the discharge began to assume a healthier character, gradually to diminish, and at the end of the second month he was sent into the country. There was a fair amount of movement from the clavicle, not the shoulder joint, and the Sinus had completely healed.

2. A strong, healthy little boy, about 8 years of age, sent up from the country for operation. Profuse discharge from an opening just below the shoulder

joint, and great pain on moving the arm. The shoulder joint was exposed by a single, vertical incision, the head of the humerus carefully dissected out and the diseased portion sawn off. The wound was plugged with lint soaked in carbolic acid, and the arm bound carefully to the side. The boy made a rapid recovery, and left the hospital within two months after the operation with a very useful arm.

3. A tall, powerful man, about 40 years of age, was admitted with acute rheumatism, from which he had suffered frequently before. When he became convalescent he drew attention to an opening on the inner side of the deltoid on the right side, from which there had been a discharge for some years, accompanied by slight pain on working the shoulder, which he had often to do, being a carpenter by trade. It was decided to excise the joint, which was done by transfixing and cutting a flap downwards from the deltoid, thus exposing the head of the humerus, which was found to be extensively diseased. The diseased bone was removed and the wound carefully brought together by sutures. For two or three days he did very well, when he had an attack of erysipelas, from which he in a few days recovered. From this time he, from no apparent cause, gradually became weaker and weaker, and at the end of the third week died. No doubt the hold that the rheumatic poison had taken upon his system, accelerated his death. I could relate other cases, but the above three represent the disease as occurring in individuals of entirely different constitutions, and the results speak for themselves. Of the many operations performed by eminent surgeons, which it has been my good fortune to witness, an amputation at the shoulder joint for malignant disease of the humerus, by Sir William Ferguson, could scarcely be equalled for coolness, style and ease in operating, the small amount of blood lost, and for the formation of flaps of exactly the right size.

Of disease of the elbow joint, cases every now and then presented themselves, occurring in persons of a decidedly scrofulous constitution, a diseased state of the lungs in many cases co-existing. When the disease has been removed by excising the joint, recovery with a useful arm depends more so than in any other joint upon the care taken in the after-treatment, about which there is a wide difference of opinion, some advocating the use of a splint for a time, others speaking as strongly against it ; some commencing movement of the arm daily from the time of operation, others insisting on perfect rest for several days. With regard to the use of a splint, much depends

on the disposition of the patient; if very restless a splint must be used for a time. As to the proper time for commencing passive motion, as it is called, I cannot see any advantage in doing so until a tissue of some degree of firmness has formed between the ends of the bones. I have seen a case where passive motion was commenced very soon after the operation, and kept up daily until after the wound had completely healed. Union of so slight a character had taken place that the patient had an arm like a flail, and an instrument had to be made to fix the arm in such a position that it might be used for eating, sewing, etc., but perfectly useless for any other purpose, such as lifting, carrying, etc. It would be much better to run the risk of bony ankylosis than to have a case turn out as this one did.

Excision of the wrist joint has always been looked upon as a very unsatisfactory operation, and were it not for the immense advantage to be gained by saving the hand, it is an operation that would long ago have been discarded. Of course I refer to complete excision of the wrist for disease of all the carpal bones, the ends of the radius and of the metacarpal bones. Cases occur where there is simply disease of one of the carpal bones or of the end of the radius. The disease is easily removed, and the case is reported as a successful excision of the wrist when it is nothing of the kind. I have seen three cases, in two of which, after several months, amputation of the forearm had to be performed. I do not know how the third case terminated.

The greatest care was taken in these cases to completely remove the disease, and the closest attention was paid in the after-treatment; but there are so many synovial membranes and so many tendons whose sheaths are more or less destroyed, causing the tendons to slowly slough there is little hope except the disease is superficial and limited in extent.

Excision of any of the finger joints either for disease or injury, will generally prove successful. A great many cases of injuries to fingers and hands are brought to Charing Cross Hospital from printing and publishing houses in the neighborhood, so that ample opportunities were afforded me of following different plans of treatment. When it was deemed necessary to remove a finger, it was done by simply nipping it cleanly off with bone pliers just behind the seat of injury. This plan has at least four advantages over the ordinary method:

The finger is removed immediately behind the seat of injury, saving in this way quite half an inch.

It is done in an instant whilst the patient is under the impression that you are examining the injured member.

Chloroform is not required as is generally the case where a knife has to be used; then the bone cut off and sutures applied.

A much more useful stump is the result.

If, as is sometimes the case, a joint only is crushed it is very easy to remove the broken ends with small nippers, and by keeping it on a gutta-percha splint for a shorter or longer time, either a fair joint will be the result or bony ankylosis will take place. To some it may seem a small affair to pay so much attention to the surgery of the fingers, but to the man that has to get his living by type-setting, etc., the loss of a finger, especially the index, or even a portion of it, is no trifle. Since carbolic acid has come into use many a finger has been saved that formerly would have been removed without a second thought as to the possibility of saving it.

(To be Continued.)

Case of Filaria Oculi occurring in practice; Operation and Recovery. By G. SERMON, M.R.C.V.S.

On the 18th of December last, I was requested by J. P. Dawes, Esq., of Lachine, to examine a heavy bay Clyde mare, pregnant about eight months, and suffering from some disease of the right eye. On examination, I found considerable inflammation present. The conjunctiva was highly injected, with partial closure of the eyelids; watery discharge from the inner canthus, and complete opacity of the cornea, so much so that I could not see into the interior of the eye. After examining it very carefully I did not discover any injury or foreign body, nor anything to account for such appearance as the case presented. A lotion of plumbi Acet. and Zinci Sulph. was prescribed, with directions to let me see the mare when it was finished. Mr. Dawes called upon me in a week; he thought the eye was a little clearer, so I gave more of the lotion. I heard nothing more of the case until January 23rd; on that date the mare was brought into the city to be examined. The cornea had cleared up a little, so that I could just see something floating in the aqueous humor, and constantly moving about. At first, I could not satisfy myself as to what it could be, as the mare was suffering great pain and would not allow the head to be touched, and the eyelids being nearly closed it was very difficult to form a correct diagnosis. However, I at last came to the conclusion that

it was a case of "*Filaria Oculi*," and sent word to the owner to that effect, and that an operation must be performed to remove it, before any improvement of sight could be expected. The operation was performed at Lachine. The horse was cast with the ropes on the near side, an assistant holding the head firmly down while another retracted the lids and kept the "*membrana nictitans*" from closing, by a pair of *tenaculum* forceps; with a broad-bladed lancet an opening was quickly made through the inner margin of the cornea, and at once the aqueous humor gushed out, bringing with it the worm. On examining the eye afterwards, the wound was hardly discoverable, the cornea still retaining its natural curvature. From this date the cornea gradually became clearer, but still some opacity remains, apparently implicating the lining membrane.

Professor Williams, of Edinburgh, states that worm in the eye is unknown in Great Britain, being frequently met with in India, and less frequently in Canada. I have not met with any other case than the one now reported, and know of but one similar case, which occurred in the practice of Mr. Smith of Toronto. With these exceptions the occurrence of *Filaria Oculi* is unknown in Canada, so far as I am aware. In India, where it is more frequently seen, it occurs after damp foggy weather and where there is much stagnant water, and it also occurs during the cold months, from the first of October to the end of February. The symptoms being the same as in the case cited; conjunctivitis, opacity of cornea, intolerance of light, &c.

Two kinds of worm have been found in the eye, the *Strongylus* and the *Filaria Oculi*. The latter was the variety obtained on this occasion. It was about three inches in length and about $\frac{1}{16}$ inch in diameter; of a whitish colour, and under the microscope presented an obtuse extremity with an opening in its centre, which was guarded by two papillae, opposite each other. The alimentary canal commenced at the above opening, passing straight downwards became slightly convoluted in the middle and again straight, terminating at the end of tail, which latter was pointed and curved; a large sac or tube was observed in conjunction with the intestine, probably uterine in character, showing it to be a female. In what manner did the "*Filaria*" get into the anterior chamber? Most probably it was due to the animal having drank impure water, as pure water is detrimental to their existence. It is asserted, however that impure water containing these creatures, can be taken into the stomach with impunity, the action of digestion destroying them. It may be

that the ova or some other undeveloped form of the parasite may have been taken into the stomach, finding its way into the blood-vessels and by them carried to its future habitat, there to become developed. As it has occurred in this country there is reason to believe that fresh cases may occur; as the ova or young *Filaria* no doubt exist in our stagnant waters, as in India, and thus ready under favorable circumstances to become developed. soil and climate having a great deal to do with their propagation. In conclusion I would state that just previous to the operation, I was in doubt whether there were not two worms present, so extremely rapid were its movements. This doubt, however, was soon cleared up. Bleury Street, Feb. 18th, 1873.

Progress of Medical Science.

*Report on Medicine.** By JAMES CUMING, M.A., M.D.; Professor of Theory and Practice of Medicine, Queen's College, Belfast; Physician to the Belfast General Hospital.

[On Nutrient Enemata.]

It has often been a matter of no inconsiderable difficulty to practical physicians to select the best ingredients for nutritive injections. The cases, in which this method of administering nourishment is necessary, are usually of a very distressing character, and commonly end fatally; and it becomes a question of much importance how far the fatal termination can be said to be postponed by such means. In oesophageal cancer, in cases of poisoning by corrosive substances, and in some diseases of the stomach and primæ viæ, nourishment cannot be introduced or absorbed into the system by the usual channels, and in cases of gastric ulcer it is of great importance to give the stomach absolute rest for as long a period as possible; and accordingly attempts are commonly made under such circumstances to support the system by injections. The components of such injections recommended by Dr. Foster, of Birmingham, whose paper on the management of gastric ulcer is one of considerable value, are strong, unsalted beef-tea, milk, eggs beaten up with milk, with occasionally a little brandy and a few drops of laudanum. The value of an injection administered for the purpose of nutrition depends not only on the extent to which its constituents will be absorbed by the large intestine, but in a great measure also on the length of time which it can be retained. Substances,

* The author of this Report, anxious that every contribution to Pathology and Practical Medicine should be noticed, will be glad to receive any publication on these subjects. If sent to correspondents of the Journal they will be forwarded.

no matter what their nutriment value may be, which irritate the bowel, will be expelled too quickly to permit absorption to occur, and will probably add to the danger and sufferings of the patient by provoking diarrhoea.

Various observers have investigated the subject of absorption from the large intestine. Among the most recent observations are those of Eichhorst.^a He states that the secretion of the large intestine acts only mechanically in the direction of facilitating the onward progress of the intestinal contents. Some digestive efficacy had been attributed by several previous authors to the secretion of this part of the bowel. Eichhorst states, however, that without their having been necessarily subjected to any previous digestive process in the intestine certain substances are more or less absorbed. Among these are some of the peptones, the expressed juice of raw meat, the albumen of milk, egg-albumen when mixed with salt, and Liebig's extract of meat. On the other hand, unsalted egg-albumen, the albumen of blood-serum, fibrin, syntonin, and myosin are not at all absorbed.

The subject has been also investigated by Leube, who has given a careful and judicious appreciation of what is necessary for a clinically useful nutrient fluid. Egg-albumen with salt is, he points out, liable to two objections—firstly, it is liable to cause diarrhoea; and secondly, its injection into the rectum is commonly followed by the appearance of albumen in the urine. This latter circumstance had been previously noticed by Eichhorst, and although it probably is not attended with much risk to the kidney, still it cannot be regarded as a matter of indifference. With respect to milk, Leube points out that this fluid very often returns quite unaltered, and that its use is in many instances followed by the appearance of sugar in the urine. Still it is regarded as being more valuable than eggs. Peptone solutions had been strongly advocated by Meissner and by Voit, and Bauer. The directions given by Meissner for the preparation of a solution for this purpose are, to digest from half a pound to a pound of meat with a gastric juice, containing certain proportions of hydrochlorine and pepsine for twelve hours, at a temperature of 104° F. (40 C.). The solution is then filtered, and parapeptone is precipitated by cautiously neutralizing the acid solution. It is evident that however theoretically perfect the solution might be, and however fitted for easy absorption, the great care and skill requisite for its preparation makes it altogether unsuited for the necessities of medical practice. The expressed juice of meat is open to the objection that it is apt to cause diarrhoea, and in addition, so small a portion of juice is got from meat that its price comes to form a serious drawback to its general employment.

As a better nutritive injection than any of these, Leube recommends a mixture of very finely-minced raw meat with about one third of its weight of the pancreas of an animal—either that of an ox or that of a pig. To this lukewarm water is added in sufficient quantity to make the whole into a pulpy

consistence. This latter part of the process requires some time and attention, inasmuch as the material to be used must pass through an injection apparatus. The addition of fat in the preparation of about one-sixth of the meat is in some cases an advantage. A larger proportion of fat than this has a tendency to cause too early evacuation of the contents of the intestine. A mixture of this kind is, according to Leube, in a great degree digested in the intestine, and by means of it a considerable amount of nitrogenous material is introduced into the system. If starchy substances are added to the mixture they are changed so quickly into sugar by the action of the pancreas that slight diarrhoea is brought about. He found that after the employment of these injections more nitrogen was excreted by an animal deprived of nitrogenous food than had been excreted previous to their use. He found also, that injections such as we have mentioned preserved the equilibrium between the consumption and the excretion of nitrogen, when an animal was deprived of a portion of the nitrogenous food which it had been accustomed to receive by the mouth; and, finally, a quantitative examination of the fæces, supplied direct evidence of the absorption, by showing that the amount of nitrogen in them was less than what had been introduced into the intestine. From the facts Leube considers himself entitled to state that a real digestion of meat takes place in the rectum and colon by the aid of the pancreatic juice furnished by the substance of the pancreas, and that the products of this digestive process are absorbed in considerable quantity into the blood. This mode of nutrition has been employed in three cases with apparently great benefit. Of these one was a case of catarrh of the stomach, with severe vomiting and cancer of the peritoneum; another was a case of cancer of the stomach; and the third was a severe case of accidental poisoning by tincture of iodine with great corrosion of the stomach. In the last case, which is one of great interest, there could be no doubt of the nutritive value of the injections, the patient having been in May of this year, about six months after the poisoning, able to be up during the whole day although still requiring the use of the injections recommended by Leube.

The general conclusions at which Leube arrives are, that the injection into the rectum of finely chopped meat mixed with the finely chopped substance of the pancreas, hardly ever produces diarrhoea. The injection is retained commonly for from 12 to 36 hours. An enema of water must be always given before the nutritive one. This precaution ought to be taken even if the bowels had been spontaneously moved soon before the time for the administration of the enema. It is better to allow an interval of a day to elapse before repeating the injection, if, after having been for a period well borne, evacuations of the bowels begin to occur soon after its administration. The patient, after this species of injection, is said to experience no uncomfortable feeling, no weight or pain in the abdomen; on the contrary, the sensation of emptiness diminishes, hunger becomes less urgent, and the pulse becomes fuller.

ON URÆMIA.

Some interesting additions have been recently made to the already copious literature of uræmia. It is a remarkable fact that, although innumerable observations and experiments have been made to determine the cause of the well-known uræmic poisoning, and although with regard to many incidental points regarding it, our knowledge has been greatly advanced, still the central problem in the causation of uræmia remains as yet unsolved. We seem not much nearer the determination of the question, whether uræmia is caused by the presence of an abnormal amount of urea in the blood, than we were at the time of the earliest experiments on the subject. The subject is one of great practical importance, because on the elucidation of it depends our hope of being able to deal with the phenomena of uræmic poisoning with any reasonable prospect of success. Every physician of experience has met with cases in which the most formidable uræmic symptoms proved to be only transitory, although undoubted organic disease of the kidney existed. And it must be admitted that our therapeutic resources do not always enable us to claim much share in the favourable issue in such cases. Nevertheless their frequent occurrence gives ground for the expectation that we may ultimately be enabled to aid in promoting the temporary amendment which we so often witness in Bright's disease. It becomes accordingly a matter of great moment to ascertain to what change in the blood, or in the tissues, the phenomena of uræmia are to be ascribed. The first great problem is, to determine what is the part played by urea in the production of the symptoms in question. There can be no doubt that urea is the principal element in the urinary secretion, and for a considerable period it was naturally regarded as the most important factor in the production of uræmia. It was clearly impossible to arrive at a conclusion on the subject merely from clinical observation, and resort was had to physiological observations and experiments on the lower animals, for the purpose of ascertaining whether urea accumulated in the blood when the kidneys are removed. The first experimental attempt at a determination of this problem was made by Prevost and Dumas, who communicated the results at which they had arrived in a paper which was read at a meeting of the *Société de Physique et d'Histoire Naturelle* of Geneva, in November, 1821.^a The method adopted by these observers was to examine the blood of animals in whom the kidneys had been removed. They found that dogs, cats, and rabbits, survived the removal of their kidneys for from five to nine days, and that during the first three days after the operation they showed scarcely any sign of disturbance. On examination of blood taken from these animals they found evidence of the presence of a considerable amount of urea, no trace of which they had been able to discover in the blood of animals who had not been

subjected to this operation. From these experiments they came to the conclusion, as had before been suggested by Rollo, that the kidneys merely eliminated urea from the blood, and had nothing to do with its formation. Nephrotomy had been previously performed by Vesalius and by Richerand, but neither had employed chemical analysis for the purpose of determining the condition of the blood. Prevost and Dumas suggested that probably the liver was intimately concerned in the production of urea, an idea which they founded on the supposed diminution of urea in the urine in cases of chronic hepatitis. Richerand, also, having found in his nephrotomized animals the gall-bladder considerably distended, thought it probable that the biliary secretion could to some extent take the place of the urinary, when the latter was suppressed.

The paper of Prevost and Dumas has always been considered, and with justice, one of the most important contributions to this subject which has been made, and from it, it seemed probable that urea, as the principal solid constituent of the urine, was also the principal cause, by its retention in the blood, of the peculiar aggregation of symptoms which have been grouped together under the name of uræmia; for there is every reason to believe that in advanced cases of Bright's disease, the kidney, as far as its function is concerned, is almost altogether useless. Prout^a taught that it was universally admitted by physiologists that the kidneys are little more than the outlets by which, as an excreted principal, urea is removed from the economy. He gave it, however, as his own opinion, that in the healthy condition of the system imperfectly developed urea may be found in the economy, which, in subsequently passing through the kidneys, is reduced to the crystallized form; so that the kidneys are not to be regarded as entirely passive in the matter.

Very soon after the observations of Prevost and Dumas, Segalas and Vauquelin showed that urea could be injected into the veins of animals without giving rise to any symptoms of disturbance beyond diuresis; and, as a consequence of these experiments great expectations were formed of the value of the administration of urea as a diuretic. It was suggested by those observers and has been supported by Stokvis, Hammond, and others, that some of the injurious effects of the suppression of the renal secretion are to be attributed to other constituents of the urine, and that the extractives especially have much to do with them, so that the apparently anomalous conclusion has been arrived at that suppression of the urinary secretion brings about fatal effects, not in virtue of its effects, not in virtue of its principal constituent being retained in the system, but because of the non-excretion of substances certainly in a physiological sense much less important.

From a clinical point of view Bright, Owen Rees, and Christison pointed out that a large amount of urea might be present in the blood without any

^a The paper was published in the "*Annales de Chimie et de Physique*," par Gay.—Lussac et Arago. Tome 23, p. 90.

^a On the Nature and Treatment of Stomach and Urinary Diseases. Third edition. 1840, p. 87.

symptom of uræmic poisoning being present. Christison^a dwells forcibly on the fact that he had repeatedly had occasion to remark the absence of any affection of the head, notwithstanding that the blood was, so to speak, poisoned with urea, in the advanced stage of granular disorganization of the kidney.

Frerichs proposed an explanation of these facts which was ingenious, and which he claimed to have demonstrated by clinical observations as well as by physiological experiments. The phenomena of uræmic poisoning are not, according to Frerichs, caused either by urea itself or by any other constituent of the urine, but occur when the urea which is accumulated in the blood is changed within the vessels by means of a peculiar ferment, into carbonate of ammonia—a transformation which readily occurs, as is known, outside of the body. It is this carbonate of ammonia which causes the morbid phenomena; and it is possible, according to Frerichs, to produce the symptoms of uræmia by the injection of carbonate of ammonia into the veins. So that for the production of uræmia two things are necessary—firstly, an accumulation of urea in the blood; and, secondly, the presence of a ferment capable of decomposing it. If no ferment is present a large quantity of urea may exist in the blood without any morbid symptom being produced.

This explanation found many supporters after its first publication, but is now pretty generally discredited. Clinical observation has not confirmed the statement of Frerichs regarding the invariable existence of a notable amount of carbonate of ammonia in the expired air in fatal cases of uræmia, and experiments on the effects of the artificial introduction of urea have also gone to contradict this theory. A modification of Frerich's theory, proposed by Treitz, to the effect that the supposed decomposition of urea into carbonate of ammonia takes place, not in the blood but in the intestinal tract, and that carbonate of ammonia is thence absorbed into the blood, met with some acceptance especially as it fell in with a highly important discovery published by Bernard and Barreswil,^b in 1847, regarding a mode in which urea is occasionally excreted. On the basis of numerous and highly interesting experiments these observers stated that after nephrotomy has been practised on an animal, urea does not immediately undergo an increase in the blood, owing to the fact that the stomach and the small intestine take on a vicarious action and secrete urea. Once, however, excreted into the cavity of the primæ viæ, urea becomes rapidly changed into carbonate of ammonia, so that no urea can be found after the death of the animal. The objections, however, to the theory of Frerichs are equally valid as against that of Treitz.

A different explanation of the formation of urea was offered by Oppler and by Zalesky, each of whom conducted an independent set of experiments in the

laboratory of Hoppe-Seyler, and also by Perls;^a all of these observers agreed that urea is not increased in the blood after the extirpation of the kidneys, but that it is greatly increased after ligature of the ureters, the increase being greatest in from 24 to 28 hours after the operation, and that the extractives and creatine are also much increased after ligature of the ureters.

It has been objected to the value of this method of experimenting that ligature of the ureters does not give rise to true uræmia, but by causing the urine to be retained in the body, promotes its decomposition and reabsorption into the system.^d This distinction has led Vogel^e to suggest that a distinct name should be given to cases of this kind, and he has proposed ammoniaemia to designate these, while uræmia would be reserved for those cases in which the secretion of urine is diminished or suppressed.

These experiments and observations seemed to have settled the question, and the opinion accordingly was adopted that the kidneys really formed the urea which appears in their secretion, an explanation which is, it will be seen, directly opposed to that of Prevost and Dumas. Unfortunately, however, we are again met by a number of contradictory results. Meissner found that there was a notable increase of urea after extirpation of the kidneys, and he accounts for the contradictory results obtained by Zalesky by regarding them as exceptional and caused by the vicarious action of the mucous membrane of the stomach and small intestines, separating the urea, which is no longer excreted by the usual channels.

A good deal of interest was excited by the statements originally made by Heinsius and Stockvis, and confirmed by Meissner, that the liver in mammalia contains urea. Heinsius stated that in a liver removed from the body and kept at a temperature of 40° for 20 hours, urea was found in greater quantity than in the liver immediately after its removal.

On the other hand Gscheidlen^a made a number of comparative experiments from which he came to a conclusion opposed to that of the observers we have named. He found urea in the liver, but not in greater amount, relatively, than in the blood. He found it not only in the liver but in the spleen, kidneys, lungs, brain, and in the lens and the aqueous and vitreous humour of the eye. On the other

^a Qua via insufficientia renum symptomata uræmicæ efficiat, quoted by Falek, Virchow's Archiv., Bd. 53, S. 335.

^c The conclusions of Perls are as follows:—

"Qui numeri hæc docent:

"(1) In bestiis, quarum renes erant excisi, urææ accumulationem non observavi; in iis, quarum ureteres subligati erant, urææ copia aucta erat maximeque inter 24—28 horas post operationem factam videbatur esse.

"(2) Copia extracti aquosi post operationem crescit.

"(3) Copia Kreatinini et omnino et præsertim cum extracto aquoso, in quo salia diversa insunt, comparata magnopere crescit."

^d Rommelaere, de la Pathogenie des symptomes uremiques. Bruxelles, 1867, p. 4.

Handbuch der Pathologie und Therapie. Erlangen, 1856 65, S. 428.

^e (Leipzig Engelmann, 1871. Prager Vierteljahrschrift.

^a On Granular Degeneration of the Kidneys. Edin, 1839, p. 230.

^b Archives Générales de Médecine.

hand, he never found any trace of urea in the muscles under normal circumstances. A fact which if verified, would lead to important conclusions.

Some ingenious observations have been made by Rosenstein,^b well known by his valuable work on Diseases of the Kidneys, for the purpose of throwing light on this subject. It has long been known that when one of the kidneys is either congenitally absent, or has been destroyed by disease, an increase takes place in the bulk of the remaining organ. In so far as any definite opinion can be said to exist on the subject it would seem that the increased bulk of the remaining kidney is regarded by pathologists as depending on an increase in the secreting structure of the kidney. Valentine,^c who investigated the subject experimentally, came to the conclusion that in animals in whom one kidney had been removed the remaining kidney exhibited the maximum of increase in the convoluted tubes; the pelvis, the straight tubes, and the ureters being also dilated, and an additional amount of blood being present in the kidney.

Paget^a says that when one kidney is destroyed the other kidney enlarges; "more renal cells develop, and discharge, and renew themselves; in other words, the existence of the constituents of the urine in the blood that is carried to every part determines the formation of the appropriate renal organs in the one appropriate part of the body."

It occurred to Rosenstein that, from the condition of the convoluted tubes, which are the true secreting parts of the kidney, in animals from whom one kidney had been removed and who had survived the operation for some time, some information might be derived as to the function of the kidney as regards the production of urea. He found that the increase of the remaining kidney was mainly an increase of weight, and in a less degree an increase of volume, and that there was no increase in the malpighian bodies or in the convoluted tubes. The greater weight of the kidney depends on an increased amount of fluids being present in it—namely, blood, lymph, and urine, and on a thickening of the tissue elements, caused by increased nutrition, but only in a very slight degree on a real increase in the epithelial cells or in the connective tissue. The increased functional activity of the enlarged kidney completely compensates for the loss of the other, both as regards the secretion of the urine and as regards the formation of urea. From these facts Rosenstein draws the deduction that the kidney takes no part in the formation of urea. In one animal he found that the amount of urine and of urea was almost exactly the same before and after the extirpation of one kidney, and that when the second kidney was removed three days after it showed but a very slight increase in bulk and in organic contents. He concludes, accordingly, that no increase of secreting

substance can have taken place in such a short time, and from the fact that both urine and urea were undiminished, that the kidney cannot be the efficient agent in the formation of the latter, so that we return to the view of Prevost and Dumas again, as confirmed by the very latest experiments on the subject.—*Dublin Medecine Journal* Jan. 1873.

EFFECT OF BROMIDE OF POTASSIUM EMPLOYED IN THE FORM OF A LAVEMENT IN CASES OF UNCONTROLLABLE VOMITING OF PREGNANCY.

Dr. Gimbert, after noticing the very variable forms and degrees of vomiting occurring during pregnancy, remarks, that in some women this generally trivial accident becomes a most serious and dangerous symptom, the patient sinking into a state of marasmus, or aborting. A lady in the third month of her second pregnancy was attacked with incessant vomiting, day and night. She complained of severe pain in the stomach, chest and abdomen, violent headache, a sensation of burning along the œsophagus, and intense palpitation of the heart. An extreme thirst and obstinate constipation completed the symptoms.

Enemas of bromide of potassium, as well as of soup, were prescribed. The first day (fifth of the disease) the patient "absorbed" 6 grammes (a drachm and a half), and on the following night was quieter. Next day she absorbed 8 grammes (2 drachms). The vomitings were less frequent and not so painful. The third day she took 10 grammes, and from that time the vomitings were arrested. Dr. Gimbert has several times since administered the bromide of potassium by the rectum, in less severe cases it is true, but always with the same excellent results. He has never restricted the doses, and has always found them admirably borne.—*Bull. de Therap.* and *Bull. de la Soc. de Médecine de Gand*, Mai, 1862.

[*Hypodermic use of Strychnia.*] By JULIAN J. CHISOLM, M.D., Professor of Operative Surgery, University of Maryland; Surgeon in Charge of the Baltimore Eye and Ear Institute, etc., etc.

Twelve months since I published my experiences with the hypodermic use of strychnia in retinal troubles. Since that period I have used it daily in nervous affections of the eye, with very varied results, at times very striking, again quite negative. In no case has the use of the remedy been followed by any injurious effects, although a few cases were quite susceptible to its toxic influences. I have been surprised to find that in increasing daily the quantity injected under the skin, a much larger amount than that mentioned by the books may be safely administered, with good results. In my early experiences I always commenced with the $\frac{1}{160}$ of a grain, and slowly increased until $\frac{1}{30}$ of a grain was used, which latter amount I was afraid to exceed. Now I usually commence with the $\frac{1}{40}$ of a grain.

The strength of the solution which I use is sulph.

^b Virchow's Archiv. Bd. 55, s. 141.

De Functionibus Nervorum Cerebraliū et Nervi Symptomatici, p. 148.

Lectures on Surgical Pathology. Ed. by Turner. London. 1863. P. 19.

strychnine grs. iv., aquæ dest. $\bar{3}$ j, each minim containing the $\frac{1}{120}$ of a grain of the alkaloid. The sulphate of strychnia is quite soluble in pure water, at least to this extent, and in this strength it makes a very convenient form for administration. For the past ten months I have usually commenced the strychnia treatment by injecting 3 minims of the solution, equal to $\frac{1}{40}$ of a grain of the drug. If no marked bracing of the muscles, heaviness of the calves, tightening of the jaws, or stiffening of the joints ensues, the amount of the solution for each day's injection is increased by one minim until a maximum dose is finally reached, which is frequently $\frac{1}{8}$ and often $\frac{1}{5}$ of a grain. In one case $\frac{1}{4}$ of a grain of the sulphate of strychnia was injected at a dose, and continued daily, without causing any special annoyance. When in progressively increasing doses the physiological effects of the remedy, indicated by muscular contractions, are excited, I do not diminish the quantity for the next injection, as experience has taught me, that the same dose, when repeated for two or three days, will cease to annoy, and then an augmentation may be safely indulged in. By this methodical and gradual increase, the maximum dose can be attained in from 15 to 20 days. In some cases I have found that the good results are not secured until large doses are reached, simulating, in this respect, the large doses of iodide of potassium, which excites a rapid subsidence in syphilitic symptoms, when ordinary doses of from 5 to 10 grains, continued for a long time, had produced no decided effects.

When the dose of strychnia has attained its maximum, that is to say, as much as can be comfortably borne, it should be steadily persevered in at this strength as long as any improvement shows itself. I have continued the injection of $\frac{1}{8}$ grain doses for 3 months. Should, from any cause, the daily injection be interrupted, even for a short time, it is not safe to resume the dose left off with, but a smaller quantity should be used, which may be rapidly increased until the full dose is again reached. As with all potent medicines, cases will now and then be met with, in which the commencing dose of $\frac{1}{120}$ of a grain may prove too powerful. In a single case only have I experienced uncomfortable muscular contractions from this small quantity. The effects in this patient were sufficiently annoying to establish a rule for a cautious commencement in every case. I have heard of one case of marked idiosyncrasy in which a single dose of $\frac{1}{30}$ of a grain of strychnia (the first), hypodermically used, caused convulsions and insensibility, which continued for several hours. The injection was made by a country physician, and I cannot vouch for the accuracy of the amount injected. In another case, coming under my immediate observation, that of a young lady of nervous temperament, an attack of convulsions of short duration was brought on by the use of 1-20 of a grain, which seemed to be the largest dose that she could take with safety. The best results are obtained when two injections are made daily, morning and evening. When it is inconvenient to make more than one injection per day, the effects upon the system may be kept up by the administra-

tion of strychnia pills, first in doses of 1-40, then 1-30 and finally 1-20 of a grain each, twice a day.

There is no advantage in injecting the solution under the skin of the temple, or other portion of the head, for the cure of eye or ear diseases, as it causes needless pain to puncture frequently these sensitive surfaces. As the remedy can only act upon the nerves of sight and hearing through the instrumentality of the nerve centres, and by the circulation, I always select the arm as the least sensitive and most convenient seat for the injection. In my experience, the loose skin near the outer surface of the shoulder, or in the upper and outer third of the arm, is the preferable site for the operation. Care must be taken to avoid superficial veins, otherwise bleeding from the puncture annoys, and the arm becomes sore. When the point for throwing in the injection is carefully selected, the puncture should be bloodless.

The canulated trocar of the hypodermic syringe should pass through the skin without resistance. If force be necessary to enable it to reach the subcutaneous cellular tissue, the cause will be found in a blunt heavily shouldered point which needs the cutler's care. As obtained from the instrument maker, the new points are always dull and need sharpening. The necessity for keeping this useful instrument in order is not so seriously felt by those who use it seldom; nor would the pain of application be complained of by persons upon whom it is now and then inserted for the relief of severe neuralgias. When it is systematically used once or twice every day for months upon the same individual, its easy or forced introduction, with the subsequent little or much uneasiness, will be commented upon.

Those not skilled in the use of the hypodermic syringe should, in applying it, first lift a fold of the skin between the thumb and index finger of the left hand, then place the point of the canula at the base of this fold, avoiding visible veins, and thrust it forward until at least one half the thickness of the fold is transfixed. When the canula has perforated the skin and its point lies in the loose cellular tissue in the centre of the fold, all resistance to the onward progress of the point will have ceased. The canula needle will now have gone sufficiently deep under the skin. In the next step of the operation the surgeon lets go the fold and with the same fingers steadies the syringe so that the point may not draw out of the puncture; nor, on the other hand, be thrust too deeply whilst the fluid is being injected. As the injected fluid causes an elevation of the skin, making a little reservoir in the subcutaneous cellular tissues with the puncture as an outlet, it is best by pressure with the finger upon this prominence to disseminate the fluid through the plane of areolar tissue before the canula be withdrawn; otherwise some of the injected fluid will escape, and the full dose not be retained for absorption.

As we are dealing with a very potent remedy, it is the safest course to put in the syringe only the dose to be injected. Some physicians fill the syringe, and throw under the skin from this quantity the number of minims desired, as marked upon the scale attached

to the instrument. Or they screw down the gauge upon the handle and then inject from the large quantity. Should the screw gauge be loose, or the piston work hard, a larger quantity than is desirable will escape through the canula, and an innocent dose may be accidentally converted into a poisonous one by this addition of a few minims of the solution. I adopt the following plan in using the syringe. First, take into the syringe more fluid than the dose to be injected. Holding the instrument with canula upwards, expel all air from the cylinder, and continue to push the piston until all excess of fluid, not required for the injection, is driven out. As I leave in the hypodermic syringe only the dose which is intended to be thrown under the skin, no possible accident can occur.

I have had patients brought to me who had received hypodermic injection at the hands of excellent physicians, and had complained much of the severity of the treatment. In these patients could be traced every puncture by its permanent scar, as if from a boil, in proof that a good deal of painful inflammation must have been excited. This condition could only have been induced by dull needles, or by the use of acidulated solutions of strychnia. The sulphate of strychnia, as already stated, is readily soluble in distilled water for the strongest solutions that should be used hypodermically; and, if the canulas be sent to the cutler's for sharpening as often as surgical instruments should be, the entire trouble which tends to make patients timid would be obviated. When used with the necessary precautions, the instrument leaves so slight a trace that in twenty-four hours the location of the puncture can scarcely be made out. As a rule, no inflammatory redness should follow upon the hypodermic use of strychnia. At times when I have accidentally punctured a small vein, a discolored spot, from blood extravasation, will remain for a few days, and its presence creates some soreness. With proper care this accident should not occur.

Cases in which the hypodermic use of large doses of strychnia will prove useful are quite varied, and their number is daily increasing. In ophthalmic surgery the free use of the remedy is in some diseases curative, in others palliative only.

Hemeralopia, even of months' standing, will yield so promptly to a few injections of the sulphate of strychnia that the remedy may be considered nearly antidotal in character, and can be relied on with confidence. I have often observed night-blindness, in recent cases, to disappear after two injections.

In cases of *muscular asthenopia*, from overwork, in which reading becomes painful, with letters running into each other, or in which the letters lose their sharp outline when looked at for a few minutes, equally prompt relief will often follow upon the hypodermic use of the remedy.

In *amblyopia* of recent occurrence, where small objects do not sufficiently impress the retina to excite clear vision, much confidence can be placed in strychnia.

In *tobacco amaurosis*, I have met with a decided and prompt response from the use of the syringe.

A case in point just dismissed from treatment was that of Mr. R., whose vision for the last three months has been steadily and perceptibly decreasing—cause, excessive use of tobacco—general vision misty, both for near and distant objects. Has been forced to give up newspaper reading. After the daily use of strychnia for two weeks, he could read "brilliant" type, which is the finest print.

In *progressive nerve atrophy* not dependent upon intracranial trouble, there is no remedy, that I am aware of, which will give such satisfactory results. In white atrophy the effects are varied; at times useful sight is restored; whilst in others, equally promising at the commencement of treatment, the effects are negative even after a careful and continued use of the remedy in full doses.

A gentleman now under treatment, a case of white atrophy with chalky disks and threads of vessels, was treated by me ten years since for the same trouble, and his case was then deemed hopeless. He could distinguish objects when brought very near to the eye, and held towards the temporal side. For the past ten days he has been taking hypodermically large doses of strychnia, and, by the use of test objects, notes a daily improvement, being able now to distinguish a door knob sixteen feet off.

In *amblyopia*, connected with choroidal atrophy, whether there be large crescents or a spotted fundus, I have observed the vision to be permanently sharpened under the hypodermic use of strychnia. In fact, whenever the retina or optic nerve needs stimulation to correct defective vision, the subcutaneous injection of a solution of strychnia will be found of benefit.

As strychnia exhibits an indirect influence over the contraction of bloodvessels, its hypodermic administration may be found of great value in cases of intra-ocular congestions, especially glaucomatous conditions, where its action, by relieving the distended bloodvessels—and thereby diminishing tension, may obviate the necessity of an operation upon the eyeball. I have heard of one case of *acute glaucoma*, in which prompt relief is said to have followed upon the hypodermic injection. Sufficient experience has not yet been collated in these congestive cases to induce a reliance upon the remedy. Should a further experience in the use of strychnia in glaucoma sustain the reputation of the drug in the relief of other eye troubles, this new field for its application will be hailed as one of the most valuable contributions to modern ophthalmic surgery.—*American Quarterly Journal of the Medical Sciences*.

MEDICINAL PROPERTIES OF THE BROMIDE OF POTASSIUM.

Prof. Sée, in one of his last lectures at the School of Medicine, expatiated upon the medicinal properties of the bromide of potassium, a drug so much in vogue and yet so little understood. He said it was often prescribed in a most reckless manner, and administered with substances not only chemically incompatible with it, but whose therapeutic action is diametrically opposed to it. For instance, it is fre-

quently ordered with, or as a substitute for, the iodide of potassium, and *vice versa*, and there is a prescription in Bouchardat's "Formulaire" which bears the name of a celebrated physician, containing these two salts in combination with the chloride of sodium and butter, which was to be eaten with bread as a substitute for cod-liver oil. The bromide of potassium acts specially as a sedative on the vascular and nervous systems, whereas the iodide is purely an alterative operating on the general processes of nutrition and elimination. The bromide of potassium is essentially a vascular remedy. It is probable that through the nerves it acts on the muscular coats of the vessels, causing permanent contraction of the latter and consequent anæmia of the organs, a condition opposed to that produced by belladonna. It acts indirectly as a sedative on the heart, which it may stop, but only when given in enormous doses. As a soporific or narcotic it is preferable to opium, particularly in children, as it does not produce headache or the other inconveniences of the latter. Its double action, as vascular and as a nervous hypostenisant, renders it a most invaluable agent in all cases of neurosis accompanied with congestion of the nervous centres, and hence its great utility in epilepsy, hysteria, chorea, etc.; it has also been found useful in the localized forms of neurosis, such as dysphagia, asthma, hooping-cough, etc. But to be useful in these cases, particularly in epilepsy, it must be administered in large doses, not less than five grammes a day for an adult, and two grammes for a child of 4 in this latter affection. When given in smaller doses it is not only a waste of time, but it increases the epilepsy; and in order to keep the disease in check, he recommends it to be taken continuously, and largely diluted, so as to prevent any irritating effect on the stomach, and to promote its elimination by the kidneys. It is a dangerous remedy in coughs, but most useful in asthma, which it relieves, not by increasing the bronchial secretions, but by relieving the respiration. The bromide of potassium cannot be replaced by the other salts of potash, nor yet by the iodide of sodium, which has lately been recommended as a substitute for it.—*Med. Times and Gaz.*, Aug 31, 1872.

VARIOLA AND TYPHUS FEVER OCCURRING AT THE SAME TIME, IN THE SAME INDIVIDUAL, AND RUNNING THEIR COURSE TOGETHER.

In the *Berliner Klin. Wochenschr.*, 1872, No. 11, Dr. Th. Simon states that an individual labouring under a recent slight attack of small-pox, was admitted as a patient into the Hamburg Hospital. Shortly after his reception there were developed in him the premonitory symptoms—intumescence of spleen, disturbance of sensorium, and the peculiar aspect of the stools—of fever evidently of the typhus type. During the desiccation of the pustules, there made its appearance a very copious eruption of roseola. The case terminated favourably.

Dr. Simon took opportunity to state that he had, during the prevalence of the variolous epidemic in Hamburg, frequently witnessed the early and wide-

spread prevalence, among typhus patients, of a roseolar eruption, most probably the result of an influence exercised by the presence of the variolous epidemic.—*Centralblatt f. d. Med. Wissenschaften*, May 18, 1872, from *Berliner Klin. Wochenschr.*, 1872, No. 11.

THE SAFEST PLACE IN A THUNDER STORM.

James R. Lane, F.R.C.S. (*British Med. Journal*, Aug. 3, 1872), in a clinical lecture on Injuries from Lightning, gives the following directions as to the safest course to pursue when one is overtaken by a storm of thunder and lightning:—

There is no doubt that the safest place for shelter is in the interior of a dwelling house or other enclosed building, at a distance from window and street-doors; and in a cellar, perhaps, for choice. Not only is the chance of being struck infinitely less, but the risk of serious injury is also much diminished. According to Dr. Sestier, the proportion of fatal cases occurring within houses is not more than one-fifth of the persons struck, and of these the greater number were standing near a window or on a door-step; whereas in exposed situations in the open country, three-fourths of the cases are fatal.

There is no doubt, also, that the popular notion that it is imprudent to take shelter under a tree, is well founded, especially if the tree be an isolated one. A low tree, or a hedge with several high trees in its proximity is less objectionable, as the lightning will generally be attracted by preference to the most prominent objects. Trees standing together in a wood are seldom struck; the electric cloud, coming within the attraction of a mass of trees, probably discharges itself insensibly through the innumerable points of foliage. A wood, therefore, is not an unsafe place, though even there it may be well to keep away from a tree which is higher than its neighbours. Many persons have been killed while standing under a hay or corn rick; these, therefore, should be avoided. From their dryness they are worse conductors than the human body, so that the current passes from them to the latter, as the readiest channel by which it can reach the ground.

But if it is unsafe to stand under a tree or a haystack, is it safe to remain in the middle of a large open space? This is a doubtful question; for a man in an erect position, though less prominent than a tree, still offers a dangerous point of attraction when no other object is near, and if struck, the whole force of the stroke will pass through the body, entering probably by his head; whereas, under the tree, the current is likely to be divided and split up, so that though the chance of being struck may perhaps be greater, the risk of fatal injury is considerably less. According to M. Sestier's statistics, of those struck in exposed situations in the open country, three-fourths are killed; under a stack of hay or corn, two-thirds; under a tree, one-half; under a hedge, one-third; within houses, only one-fifth.

It seems to be pretty generally argued that the safest plan, supposing shelter within a house to be unat-

tainable, is to remain in the vicinity of some prominent object, such as a tree, but on the side opposite to that from which the storm is proceeding, and at a distance sufficient (say twenty or thirty yards), to avoid the risk of the electricity being attracted from the tree to the person.

Under any circumstances the recumbent is undoubtedly safer than the erect position, elevated and prominent situations being of course, carefully avoided. It would be better, for instance, to lie down in a furrow than on a ridge. Additional security may also be obtained by depositing watch and chain, money, or other metallic substances which attract electricity, at a safe distance.

By pursuing the course suggested one is certain to get wet through. While under a tree he runs only a remote chance of being struck by lightning. Wet clothes, however, are not without a compensating advantage; they are all the better conductors of electricity; and if they do not convey to the ground the whole of the current, they would transmit a larger portion of it than if they were dry, so that there would be less risk of serious personal injury.

PRESSURE ON THE CAROTIDS TO CONTROL INTERCRANIAL CIRCULATION.

BY ROBERT B. McNARY, M.D., HOLDEN, MO.

It is exceedingly strange to my mind, that the very simple and efficient means by which the intercranial circulation may be controlled, by means of digital pressure upon the carotid arteries, has been so universally overlooked. The pulsation of these arteries may be plainly and easily felt on either side of the trachea, and the circulation through them may be almost as certainly controlled by properly applied pressure, as if they were held between the thumb and forefinger.

The applicability of the principle to the great variety of diseases in which it is indicated, will of course suggest itself to the mind of any physician, and I will therefore not occupy your space by any expatiation upon the subject, but will remark, by way of illustrating its practical applicability, that I have succeeded in relieving a great many cases of violent headache, a convulsion or fit in a young man. But the stronger proof of its value as a remedial means was afforded in the case of a boy, eleven or twelve years old, who had been very dangerously ill for several days, with what was supposed to be congestion of the brain. He had had several convulsions, and had been perfectly blind since his illness began. I was requested to see him at night, and remain the next morning, till the physician in whose care he was, could meet me in consultation.

When I examined him, the symptoms were of such a peculiar nature, that I was utterly at a loss as to what I should do, in which unpleasant condition of my own mind, the above idea occurred to me, and I had hardly got my fingers well and firmly fixed, when he told me that his headache, (which I neglected to mention with the other symptoms), was better, and within less than five minutes I

think his sight had perfectly returned, he was free from all pain or uneasiness, and continued to recover rapidly, without *any medicine*.

A good many cases in previous practice, have since occurred to me in which the same principle *might* have been applied with similar results, had I known it. I have never heard it from a medical man, or seen it in a medical journal, but it does not seem to me to be of sufficient importance to be suggested, and at the command of every medical man, when the necessities of a case require it.—*St. Louis, Med. and Surg. Journal, Jan'y., 1873.*

ON THE USE OF PEPSINE WINE IN THE ARTIFICIAL FEEDING OF INFANTS. BY W. J. CUMMINS, M.D.

*** There is nothing, of course, like a good breast of milk for an infant, if it can be had; and in "the good old times," when the peasantry and small farmers lived on potatoes and milk, without stimulating their nerves with strong tea, nor their brains with penny-a-liner's words, there was an ample field for the selection of a foster-parent; but now even when the *rara avis*, a good nurse, is procured, she is so independent and knows her power so well, that any caprice must be humored, and she is always ready to throw up her situation or neglect her charge. A wet-nurse is, then, an admitted torment, and a balance struck between its advantage and disadvantage is generally again the former.

Artificial feeding by bottle is a great improvement upon the old system of spoon-feeding, as the act of suckling stimulates the salivary glands and insures due in-salivation, which is an important part of infantile digestion. With such an aid the stomach of most human infants is vigorous enough to fall into the way of digesting cow's milk, properly diluted, and mixed with sugar and cream to assimilate the proportions of its constituents to human milk—but besides the relative excess of casein and albumen contained in cow's milk when compared with human, the coagulum of the latter is "soft, flocculent, and not so thoroughly separated from the other elements of the fluid as the firm, hard curd of cow's milk is from the whey in which it floats." (West.)

When we reflect that the digestive organs of the human infant are found to digest human milk, and the force of its gastric juice proportioned to the solution of its soft, flocculent coagulum, we can understand why the solvent power of its gastric juice is sometimes unequal to redigesting the firm curd of cow's milk. When such is the case, acetous fermentation is quickly set up; offensive gases distend the stomach and taint the breath, vomiting and diarrhea set in, and in process of time the little patient sinks into a miserable state of marasmus, and dies. The remedy for this state of things is simple, for although we cannot change the elementary composition of the milk we have to use, we can introduce into the infant's stomach a digestive power proportioned to the food it has to use—the organic principle of digestion taken from the stomach of the calf.

It is now many years since I first applied this simple theory to practice in the case of one of my

own children, who, when about three or four months old, was reduced to a condition of marasmus by vomiting and diarrhoea due to imperfect digestion of cow's milk. I ordered him fifteen or twenty drops of Pepsine wine, to be given immediately before or after each meal. Soon after commencing it he began to improve, and by degrees all bad symptoms vanished, and nutrition was quite restored.

The Pepsine was continued until he was nearly two years old, and he thrived at least as well as if he had been wet-nursed; other treatment, of course, pre-aided and accompanied the use of Pepsine, but it was not until the latter was commenced that improvement took place.

Shortly after, a child born in England, and bottled, was brought over to this country when about six months old; he also was suffering from infantile dyspepsia, and was pining away in a listless, apathetic state, quite indifferent to surrounding objects, and appearing as if he would lapse into idioey from mal-nutrition of the nervous centers. I immediately ordered him Pepsine wine, which produced such beneficial effects that after it had been continued about twelve months, he had become a bright, intelligent, well-nourished child.

Since then I have never recommended a wet-nurse, and have used Pepsine wine largely in dispensary, hospital and private practice, and have seen many apparently hopeless cases recover under its use.—*Dublin Journal of Medical Science.*

THE CURE OF STAMMERING.

The mode of treatment followed by M. Chervin, of Lyons, in this affection, has lately been the subject of investigation by a commission appointed by the Department Council. The commissioners state that they find the system successful, rapid, and permanent in its effects; which opinion confirms those of earlier date, given by commissions appointed in France, Belgium, Spain, etc.

Eight patients, severely affected with stuttering, were submitted, under the observation of the commissioners, to the system of M. Chervin. They varied, in age, from ten to twenty-nine years, and none of them could speak without stammering to an extent most distressing to themselves and to those who heard and saw them. In some cases the act of speaking was accompanied with convulsive movements of the mouth and eyes; in others, with spasmodic respiratory movements. Some had stammered from their infancy; in others, the defect had been caused by a shock to the nervous system. Ten days after they had been placed under M. Chervin's treatment they were seen by the commissioners, and each of them could then speak distinctly without stammering or hesitation; and, on the 28th, they were pronounced cured, speaking then with natural ease and rapidity.

The system is as follows: All mechanical contrivances are discarded; but he teaches the patient, by means of a large number of exercises, gradually to pronounce with distinctness vowels, consonants, syllables, and sentences. He pays great attention to the art of

respiration, which he seeks to regulate. He teaches his patient to take, at certain intervals, a slow but normal inspiration, which is succeeded by an even, continuous, and loud expiration, during which pronunciation is effected. The course of treatment occupies twenty days, the time being divided into three periods. During the first the patient is restricted to complete silence, so that the old habit may be broken; during the second period the patient is taught to speak slowly and deliberately; and during the third period he acquires the practice of speaking fluently and without eliding the words. This method is stated to have succeeded in the most difficult cases, and the good results are said to be permanent; but this greatly depends on the patient, who must occasionally make use of the means which were first used to cure him.

SULPHUROUS ACID.

Dr. Henry Manfred, in an article in the *Cincinnati Lancet and Observer*, says of sulphurous acid, that it has unrivalled disinfecting power, far superior to carbolic acid, besides being free from its irritating qualities and its disgusting, penetrating smell. But the most remarkable characteristic of this acid is its antagonism to pus. The doctor gives the history of a case of psoas abscess, where the constant free discharge of pus was draining the life powers of a little girl. After exhausting all of the usual remedies without benefit, he, as a last resort, injected the cavity thoroughly with sulphurous acid, and in a few days the discharge ceased entirely, and the patient eventually recovered. The doctor has also used this acid in confluent and simple variola, in scarlatina, in typhoid fevers, in multiple abscess, in adynamic fevers, and in those cases of blood-poisoning where the secretions are offensive, the vital powers declining, accompanied with a general tendency to putrescence and decay. In variola he generally prescribes half a drachm of the acid, diluted with water, three or four times a day, and applies it also locally to the pharynx by means of a gavel or atomizer. In the bowel lesion of typhoid fever it lessens the acidity of the discharge, and promotes the healing of the ulcers themselves.

NITRO MURIATIC ACID AS AN HEPATIC STIMULANT.

Dr. J. H. Kidder, in the *Western Lancet*, says: Inspector-General Martin, of the British army, thinks that ascites, or at least that form of it dependent upon cirrhosis of the liver, can be entirely and permanently relieved, and the condition of the liver greatly improved, by the use of nitro-muriatic acid applied systematically. He bases his opinion upon a very extended experience during a long service in India, the results of which are to be found in the *Lancet* for April, 1866. The acid should be made extemporaneously by adding to five parts, by volume, of strong hydro-chloric acid, three parts of nitric. The additions must be made gradually, shaking the bottle well each time. After the acids have been

well mixed, the bottle or jar should be left unstopped for twenty-four hours before use. Three fluid drachms of this acid diluted with one pint of water, form a lotion, which is to be applied over the region of the liver, twice a day with *brisk friction*, while at the same time the feet are immersed in a bath of the same. The hands of the attendants making the application should be protected by oil silk gloves, else bilious diarrhœa will result to them, from absorption of the acid through the palms of the hand. Giving the acid internally does not help any. Applied in this manner steadily and perseveringly, the obstruction of the portal circulation will be removed so far as to secure to the patient a fair degree of health and comfort not otherwise to be obtained.

AMMONIA IN SUSPENDED ANIMATION.

The value of the injection of ammonia, as recommended by Professor Halford, in cases of snake bite and suspended animation, has been again demonstrated. A lady in Melbourne recently swallowed, by accident, an ounce of Browne's chlorodyne, which is a mixture of chloroform, morphia and prussic acid. When seen by her medical attendant, she was, as he imagined, on the point of death, cold, insensible to everything, and giving only occasional gasps as signs of breathing. Recollecting a former case, in which a young man who had taken chloroform was revived after death had apparently occurred, the doctor mixed half a drachm of the liq. ammon. fort. with one and a half of water, and within the space of one minute injected the whole into a vein of the arm. In a few minutes the pulse returned, the breathing became natural, and in twenty minutes the whole body had regained its natural warmth; but perfect consciousness did not return for some hours afterwards. The patient made a rapid recovery. Two further instances have been reported in which the timely use of the injection saved the victims of snake bites from the death which threatened them.—*N.Y. Med. Jour.*

REMOVING A FOREIGN BODY FROM THE NOSE.

Accidentally opening an old number of "Ranking's Abstract," I read an article headed, "A Novel Mode of Removing a Foreign Body from the Nose," in which is related the case of a child from whose nose, surgeons failed to remove a cherry-stone, and were outdone by the village barber, who administered an emetic, and, at the moment when vomiting was about to commence clapped a handkerchief tightly over the mouth of the child. I was reminded of the source from which was obtained a procedure I have invariably instituted in such cases, and never without success. Very many years ago, that best of practitioners, Dr. J. P. Evans (then residing in Arkansas), when on a visit to his native place, Tazewell, Tennessee, was called to the country to see a child with a foreign substance in its nostril, which had held its position in spite of efforts for its removal directed by the professional skill of "all the region round." On the way, the Doctor was

saluted by an aged negro woman, who asked him if he was going to see that child. On receiving an affirmative answer, she said: "Put yer finger 'long side the nose, tother side from the thing, and with yer own mouf over the child's mouf, blow hard, and its bound to come out." He followed her directions, and occasioned the result as she had predicted. R.—*Atlanta Medical and Surgical Journal.*

NEW PLAN OF EXTRACTION OF BODIES FROM THE EAR.

Dr. Loewenberg, of Paris, describes a new plan for extracting solid bodies from the ear, as follows: A very small brush is made by rolling and fixing a narrow strip of old linen around a thin wooden handle (a match, for instance), and unraveling its free border to the length of a quarter of an inch. The end of the so-obtained fringe is dipped into a warm and very concentrated solution of glue, and applied to the visible part of the foreign body, or, rather, the operator leans it against the body by letting it glide very softly, and without exercising any pressure, over it. Previous to the application, the patient seats himself comfortably in an arm chair or on a sofa, and inclines his head towards the healthy ear. He remains in this posture from three-quarters of an hour to an hour after the introduction of the agglutinated brush. This time past, consolidation is generally accomplished, and the foreign body can be extracted by gently pulling at the brush.—(*Medical Times and Gazette.*)

ASPIRATOR TROCAR.

M. Labbe, a young surgeon and sub-professor of Paris, has been doing wonders with the capillary or aspirator trocar. He has, in many cases, punctured the bladder above the pubis, and emptied it, where it was impossible to draw off the urine with a catheter. He prefers Dieulafoy's trocar, as being perfectly innocuous, the wound healing immediately. Many Parisian surgeons already predict one great disadvantage in this new method, not to patients, but to the future generation of surgeons, as catheterism would run the risk of being altogether put aside. At first, this instrument was only used as an explorer, and was not much larger than an ordinary urethra syringe. This was gradually increased in size, and was then employed for emptying large abscesses and cavities containing liquid. Still later it is so improved as to be adapted to washing out or injecting abscesses or cavities. It may yet even supersede the lancet for phlebotomy, as the risk of air entering is *nil*, and the ligature above the elbow can be dispensed with.

THE MONOBROMIDE OF CAMPHOR.

Dr. W. A. Hammond has used this new preparation—consisting of one equivalent of camphor with one of bromine ($C_{10}H_{16}O.Br.$)—with marked success in infantile convulsions due to the irritation of teething. His experience in this difficulty is limited to two cases. "In each, a grain was given

hourly, rubbed up with a little mucilage of acacia. Three doses were sufficient in one, and two in the other case. The children were aged respectively fifteen and eighteen months." In cases of "headache occurring in women and young girls, due to mental excitement and excessive study," it was employed with excellent effect. One dose, of four grains, generally sufficed.

In wakefulness, he thinks it "greatly inferior to the bromide of calcium, or even other bromides."

In a case of delirium tremens, Allen McLane Hamilton, M.D., (in *New York Medical Journal*, July, 1872,) asserts that the monobromide of camphor, in five-grain doses, was of excellent service. He also says that he is convinced that it is superior to any combination of camphor and opium in chordee.

BORAX AND THE NITRATE OF POTASSA IN THE LOSS OF VOICE FROM "COLDS" IN PUBLIC SPEAKERS AND SINGERS.

Dr. John W. Corson, of Orange Co., N. J., states (*Medical Record*, Jan. 1, 1873)—

"1. That in sudden hoarseness or loss of voice in public speakers or singers, from 'colds,' relief for an hour or so, as by magic, may be often obtained by slowly dissolving and partially swallowing a lump of borax the size of a garden-pea, or about three or four grains, held in the mouth for ten minutes before speaking or singing. This produces a profuse secretion of saliva, or 'watering' of the mouth and throat. It probably restores the voice or tone to the dried vocal cords, as just 'wetting' brings back the missing notes to a flute when it is too dry.

"2. Such 'colds' may be frequently 'broken up' at the very commencement; and this restorative action of the borax to the voice may be materially aided by promptly taking, the evening previous to a public effort, dissolved in a glass of sweetened water, a piece of the nitrate of potassa or 'saltpetre' a little larger than a garden-pea; or about five grains, on going to bed, and covering with an extra blanket. The patient should keep warm next day. This both moistens the dry throat and further relieves the symptoms of 'cold' and slight blood-poisoning from suppressed perspiration, by reopening the millions of pores of the skin more or less closed by cold.

"3. These remedies have the three recommendations of being easy to obtain, convenient to carry in travelling, and perfectly harmless.

"4. They are nearly or quite useless in the actual cure of long-continued chronic disease of the throat, or acute inflammation or 'tonsillitis,' both of which require other appropriate treatment."

FLUID EXTRACT OF CASTANEA VESCA IN PERTUSSIS.

Dr. Thomas S. Davis gives in the *Medical Times* the results of the treatment of fifteen cases, with this remedy. The first eleven cases had the characteristic whoop, the remainder had well marked paroxysms, but not the full spasm, and they recovered without having it. In each case the violence of the spasm was reduced even more markedly than the number of

the paroxysms. The castanea was continued for a week, after which, in a few cases, a simple expectorant was given. The nurse in charge, who had witnessed many epidemics of the disease, declared she had never seen medicine act like it.

This medicine is made from the beans of the common chestnut tree, *castanea vesca*, natural order *Cupuliferae*. The preparation used was the fluid extract made by Mr. John M. Maisch, of Philadelphia (see *Amer. Journ. of Pharmacy*, Dec., 1871, p 529). The dose is half a teaspoonful to a teaspoonful every three or four hours, for a child six years old.

ATROPHY OF THE DELTOID AFTER CONTUSION OF THE MUSCLE.

Electricity has until now been used in vain.

ASPIRATING PUNCTURE OF THE KNEE IN A CASE OF HYDROPS ARTICULI.

The case was caused by a fall on the knee. The patient is a lad of about sixteen. Two punctures with the aspirating needle had already been performed without obtaining any liquid. A third puncture was performed in our presence, when about forty grammes (ten drachms) of blood were withdrawn from the joint. Dr. Labbé said he was glad he had repeated the punctures, as this quantity of blood lying in the joint would, as is always the case, have taken a long time to be absorbed, and also retarded the healing process. Compression had been employed with no effect. He referred to a similar case he had recently treated in private practice in which, after having made a small incision into the surface, he had withdrawn a large number of worm-like pieces of clotted blood. Healing had taken place rapidly.

In order to employ aspirating puncture with good results in cases of effused liquids in the knee, there should be at least two or three ounces of liquid in the joint. Puncture is made without reference to the patella, and where the tumour bulges most.—*Lancet*, Sept. 21, 1871.

TREATMENT OF SCARLET FEVER.

The late Prof. George T. Elliot, in a lecture on this disease, gave the following method of treatment: To bring the eruption out, if it has not already presented itself, order hot baths and blankets. Give nothing to eat at first in the eruptive stage, and only allow the simplest nourishment the first day. Patients experience great relief from baths, and the application of cold cream, or mutton tallow, over the whole body. Visit the patient twice a day. By pouring a pitcherful of cold water over the back of the neck, especially when the glands are enlarged, great comfort is experienced. As a gargle make use of chlorate of potash or soda. Pieces of ice are good in the mouth. Sprays, thrown in with Richardson's instrument, of lime water, solutions of alum and sulphate of zinc are beneficial. As a palliative to the throat, the vapor from slaked lime can be recommended. Strong beef tea, with opium, may be thrown up the bowel. Begin to feed the patient

from the second day of the eruption with animal essences. If the tonsils are enlarging and the pharynx exhibits much redness, with diphtheritic exudation, the physician has a right to say that things look bad. If the throat symptoms do not mitigate on the fourth or fifth day, the voice being affected, then one feels there is a good deal of danger. When the kidneys show hyperæmia, desquamation, or transitory albuminuria, then there is a twofold danger. Always examine the urine. When the patient has kidney disease, the treatment should be directed to the skin and bowels; when the latter are loaded or constipated, give powerful saline cathartics. Get Ronchetti's apparatus, to produce perspiration. To convalesce patients the use of iron is beneficial. The bisulphites have been recommended, but from experience, they cannot be advocated. Belladonna is not always a prophylactic, although, on account of its innocence, and a feeling of satisfaction to the practitioner and family, it is well to administer it.—*Medical Record, N.Y.*

CEREBRO-SPINAL MENINGITIS.

Robert F. Smith, M.D. (Kansas City *Medical Journal*), having been familiar with the management of this disease in the various hospitals of New York city, gives some sensible remarks on the causes, pathology, and treatment of it. In regard to the unexplained general hyperæsthesia attending it, he remarks that if the vascular membrane dipped into the posterior fissure, in the vicinity of which the sensory roots are supposed to originate, it could easily be accounted for; but may it not be explained by the fact that some of the sensory roots do arise from, or at least have been traced into, the anterior columns, as mentioned by Gray and taught by Prof. Austin Flint, jun.? The sixth nerve must be considerably irritated early in the disease, but the muscle it supplies has not sufficient force to overcome those supplied by the third nerve, though, becoming paralyzed later on, the adductores act without antagonism, and the convergent variety of squit follows. In concluding, the subjoined treatment, by Prof. Loomis, is submitted: Sol. saturat. potassii bromidi, minimi xl., every two or three hours; quiniæ sulph., grs. iii. to v., every three hours; ice to the head and spine; blisters to the nape of the neck; bleeding when the constitution of the patient will admit of it, and tonics during convalescence.

VERATRUM VIRIDE AS A HÆMOSTATIC.

J. W. Collins, M.D., of Jackson, Tenn. [*Am. Practitioner*, Sept., 1872], after an extensive use of this drug in different forms of hemorrhage, is thoroughly satisfied that it possesses this property in a very remarkable degree. He esteems it the promptest as well as the most reliable of all the means for controlling both active and passive hemorrhage. In epistaxis, periodical hemorrhages of placenta prævia, menorrhagia, in secondary hemorrhage following amputation of the cervix uteri, and in hemorrhage in two cases of uterine carcinoma, it has been uniformly successful.

Prof. J. T. Gilmore, of Mobile, Ala., has used the veratrum with entire success, after other means had failed in a secondary hemorrhage following amputation of the thigh; also in a case of epistaxis, which was so obstinate as to threaten life. He further states that the remedy, given in doses of 15 drops, is regarded by the profession in Mobile as being the most efficient remedy in certain cases of puerperal eclampsia. He has seen the best results follow its use in the periodical hemorrhages which occurred in two cases of placenta prævia.

It should be given in doses of from 3 to 15 drops, repeated every one, two, or three hours, according to the urgency of the case, always carefully watching its effects.

USES OF CHLORIDE OF AMMONIUM.

Dr. Dwar. (*Brit. Med. Jour.* July 27, 1872,) states that this article has not been employed internally as much as its usefulness would seem to indicate. It is a valuable diaphoretic and diuretic. It seems to have a special action on the serous membranes generally. He has found it of especial value in pleuratic effusions, particularly when their cause is of a subacute or chronic character.

In a case of hydrothorax, where the effusion was very abundant, absorption of the fluid rapidly took place under the use of the drug. Other similar cases are reported. It is necessary to give adults twenty or thirty grains every three or four hours. Its precise *modus operandi* has not been clearly ascertained. Although primarily not a stimulant, it may act on serous membranes by stimulating their power of absorption. Its diaphoretic action may account for its usefulness in muscular rheumatism, in which affection the author has employed it with much satisfaction. He has not found it of much use in lumbago, or articular rheumatism. Some bitter infusion is the best vehicle for disguising its taste.—*Boston Med. and Surg. Jour.*

INGROWING NAIL.

Dr. Blower, of Liverpool, (*British Medical Journal*, Sept. 21, 1872), has for the past twenty years employed compressed sponge successfully in the treatment of ingrowing nails. He renders the sponge compact by wetting and then tying it tightly until it is thoroughly dry. A bit of the sponge, in size less than a grain of rice, is placed under the nail and secured by strips of adhesive plaster. In this way the point of the nail is kept up from the toe until the surrounding soft parts are restored to their normal condition by appropriate means.

ELECTROLYSIS IN TREATMENT OF PALATO-NASAL POLYPI.

Dr. Paul Burns communicates, in a long article to the *Berlin Clinical Weekly*, July, 1872, his experience with that of other operators—eight cases in all—in the destruction of nasal and other polypi by electrolysis. One pole is held in the hand, and the other by means of a wire, is applied to the tumor.—(*The Clinic*.)

CURE FOR THE ITCH.

The following prescription having been recommended for the cure of the itch by a distinguished dermatologist of Paris, and, as I have seen it employed with unfailling success, I take the liberty of transcribing it for the benefit of your readers :

R. Carbolic Acid, one drachm ;
Water, one pint.

Or, what is still better, an ointment of—

Carbolic Acid, two drachms ;
Benzoated Lard, four ounces.

Three or four frictions in the twenty-four hours suffice to kill the acari, after which a bath of soap and water is to be taken, and the disease produced by these parasites is thus infallibly cured in twenty-four hours.—(*Paris Correspondence of the London Medical Times and Gazette.*)

DEODORIZED TINC. OF IODINE.

R

Tinc. Iodini,
Glycerinæ, aa. f ̄ i,
Sodæ Sulphitis, 3 i.

Rub the salt to a powder in a small mortar, and add the glycerine gradually, then pour in the tincture of iodine, and triturate gently until a solution is effected, and the mixture assumes an amber colour.

The above is given on the authority of the *Pharmacist and Chemical Record*, which claims that the properties of the iodine are increased by the addition of the sulphite of soda, while the glycerine renders it more convenient for local application. If so, the preparation is certainly an improvement over our present method of bleaching iodine by the addition of aqua ammonia, thus making a solution of iodide of ammonium with an excess of ammonia.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR :

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editor, Drawer 56, Post office, Montreal.

MONTREAL, MARCH, 1873.

SAVORY & MOORE'S GENUINE PANCREATIC EMULSION.

We hardly think it is necessary to remind the physicians of Canada, that Messrs. Savory & Moore, of New Bond Street, London, still continue to manufacture, in very large quantities, the original Pancreatic Emulsion, which, for a number of years, has stood the test of very extensive and extended trials. This preparation is a very elegant one, and is, we

are aware, largely prescribed, throughout the Dominion. Still, there may be some who have not yet made use of it, and it is for the benefit of such that we pen this notice. In the great majority of cases of Phthisis, Dr. Dobell of London, Senior Physician to the Royal Hospital for Diseases of the Chest, who is the originator of the preparation, has found it of considerable service. In a number of cases where we have ourselves prescribed it, we were quite conscious of its beneficial effects. Some stomachs may not bear it, but such are the exception. Certain it is, it is far better taken, as a rule, than cod liver oil, and, in the opinion of many, produces results far more satisfactory. Lately, it has been recommended in a new class of cases, and, in the October number of the *London Practitioner*, Dr. Dobell draws attention to it, as a remedy in the wasting diseases of children. The paper is of so much interest, and is so important, that we propose to publish it entire in the next number. In the mean time, we suggest a trial of the Pancreatic Emulsion, in appropriate cases, and express the opinion that, of the many preparations of a character somewhat similar, none can equal that prepared by Messrs. Savory & Moore. We direct attention to their advertisement, and state that the preparations advertised can be had from druggists throughout the Dominion.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

At the annual meeting of this Society, held on the evening of the 5th of February, the following gentlemen were unanimously elected office-bearers for the year: Dr. John Mackelcan, President; Dr. D. Mackintosh, Vice-President; Dr. C. O'Reilly, Secretary-Treasurer. The thanks of the meeting were cordially tendered to the retiring office-bearers, and to Dr. O'Reilly, for their valuable services during the past year. The meeting was largely attended and marked by great unanimity, both in the election of office-bearers and in the discussion of several matters of great importance to the medical profession. The affairs of the Society were so flourishing that it was deemed advisable to look out for a room suitable for a reading room and library.

In the *Hamilton Times*, of a recent date, we find an account of a slight ruffle in the medical world of the ambitious little city, which we give below. We do not know anything of the clergyman who, in a most extraordinary manner, insulted the whole medical profession in Hamilton; nor do we know

anything of the medical gentleman who was thus proclaimed from the pulpit "that he was the best doctor" in the city; but we feel convinced that the latter had no part or hand in the matter. It was one of those little excesses which, unfortunately, not a few clergymen are guilty of concerning the medical profession; and we congratulate Dr. Mackintosh upon having the pluck and the courage to denounce him who thus overstepped his position, and the bounds of true propriety.

STRANGE EXORDIUM TO A SERMON—A PARSON
PUFFS A MEDICO.

The following is the substance of remarks made by the Rev. W. H. Poole, in the John Street Wesleyan Methodist Church, on the morning of Sabbath last, 26th of January:

"I have the best doctor in the city. If I had not the best doctor in the city I should change my doctor; and every one that is not satisfied that he has the best doctor in the city should change. And as we should all be as safe in respect to the soul as well as to the body, we should all have the best minister; and if any one is satisfied that he has not the best minister, he should change. My doctor forbade me to preach this morning," etc., etc.

Which extraordinary statement from the pulpit has called forth the following letter from Dr. Mackintosh, who was present:

To the Rev. W. H. Poole.

SIR,—I believe the above to contain the substance of your uncalled-for and extraordinary remarks on this occasion, and as I look upon them as a direct insult to myself specially, as well as to the whole medical profession of the city, except one, I think it my duty, as the only physician present on the occasion, to resent it.

Who your doctor is, I neither know nor do I care; but that you, as a minister of the Gospel, should take advantage of your position in the pulpit, on the Lord's Day, to advertise *any* doctor, shows that you are rash and injudicious, if not vindictive, and your conduct shall not be allowed to go unproved.

I had long since made up my mind that you are not the best minister in the city, and, in accordance with the above suggestion of yours, have determined to change, and now tender my resignation as a member of your Church, and as Missionary Secretary in connection with it, and this after mature deliberation.

* * * *

Such being the case, it is a very pertinent question to ask: "If every private and official member of your congregation who is not satisfied that you are 'the best minister in the city,' were to take your advice, how small a congregation would be left?"

As your remarks were made in public, I consider

it my duty to publish the above, that you and your doctor may have the benefit of it.

I am, &c.,

D. MACKINTOSH, M.D., Edin.

Hamilton, 27th Jan., 1873.

The Report of the Supervising Surgeon of the Marine Hospital Service of the United States, for the year ending 30th January, 1872, is now before us, and contains an unusual amount of interesting matter. The several States of the Union issue periodically their reports, and scattered through them we meet with some of the most valuable contributions to medical lore. Its medical reports of the State of New York are illustrative oftentimes of ripe learning on the one hand, and well-directed liberality on the other. The volume before us is of a more general character, and deals with the general marine of our enterprising neighbours. It is interesting to notice the growth in number and importance of marine; and, as an illustration, we may mention that, until seventy years ago, marine hospitals were supported by local funds, these being raised in the shape of a tax of twenty cents per month on "seamen employed in American vessels engaged in the foreign and coasting trades, to be collected by the several collectors of customs;" and, out of the fund thus created, the temporary relief and maintenance of sick and disabled seamen in hospitals should be provided. Norfolk, Virginia and Boston were the first to avail themselves of the privilege the law accorded; and other cities followed their example. But, as the demand for relief always exceeded the resources at hand, and as seamen continued to receive support far short of their requirements, Congress passed an Act in 1837, authorizing a Board of Medical Officers. Marine hospitals are now scattered over the Republic, and fortunate is it that they are under the able surveillance of Dr. John W. Wordworth, the Supervising Surgeon.

The report contains a considerable number of surgical cases, some of which possess interesting features; and, on the whole, the First Annual Report reflects credit on all concerned in its preparation.

OBITUARY NOTICES.

DR. ALFRED NELSON.

It is with regret we record the death of Dr. Alfred Nelson, of this city. For some months previous to his decease he had not felt quite himself; he found himself deficient in strength, and not able to attend to his duties with the same activity he had

merely done. He had no particular ailment as he thought, but feared, as an elder brother, Dr. Horace Nelson (an esteemed friend and colleague of the writer's) had died at the age of forty-two, of consumption, he would die of the same disease. Unfortunately the subject of this notice lost his dearly loved wife in her confinement, about two years ago, and became very despondent. Finding himself unable any longer to attend to his practice, he asked the writer, about the beginning of December, to see him. He was scarcely able to move; aphonic, with loss of appetite and a rapid, weak pulse. Finding the case to be a very serious one, a consultation was suggested, and he was seen by two other medical friends, when aneurism of the arch of the thoracic aorta was diagnosed, he himself not being aware of imagining he had such a serious affection. He was confined to bed; ordered perfect quietness; put on iron and digitalis; denied all fluids, etc., etc.; but he did not improve; his condition remained much the same till his death, which took place on the morning of the 6th of February.

An autopsy was made thirteen hours afterwards, when the aneurism was found to be at the junction of the transverse and descending aorta. It was of an immense size, the clot measuring $4\frac{1}{2}$ inches in diameter and $10\frac{1}{4}$ inches in circumference. The cavity inside of the clot held an ordinary-sized hen's egg. There was a deposit of fat at the base of the heart. The aortic valves (only one was examined) were healthy. The œsophagus was attached to the upper portion of the sac, and the bony structure of the bodies of the first, second and third dorsal vertebrae were quite corroded, so that a large hollow-concave surface was exposed.

Dr. Nelson was of quiet and unobtrusive manners, his patients were warmly and deeply attached to him, for, with the kindness of the physician he appreciated the sympathising heart, and his sensibility and charity gained for him the esteem and confidence of all. He was the son of the late Dr. Wolfred Nelson, a physician of very extensive practice, and for more than one term, filled the chair of Professor of the City of Montreal. Dr. Nelson was a graduate of the College of Physicians and Surgeons of Lower Canada.

He leaves six small children and a large circle of friends and attached friends to mourn his loss.

WILLIAM SUTHERLAND, JR., M.D.

The subject of this notice was the son of Dr. Wil-

liam Sutherland, for many years Professor of Chemistry at McGill College. Educated in Montreal, and receiving his professional education at that University, he graduated in 1870. Scarcely, however, had his *alma mater* conferred its honors upon him, than signs of failing health showed themselves. Everything that human ingenuity could devise, or a fond parent suggest, was resorted to, but without avail; and although the disease, (Phthisis) made comparatively slow progress for a considerable time—yet though slow, it was none the less sure. Less than a month previous to his death he attended a meeting of the Medico-Chirurgical Society. He soon after, however, took to his bed, and on the 29th of January passed quietly to his rest. Thus passed away a young man of rare promise, and of brilliant genius, one who would have made for himself a proud record, if health and strength had been spared him. But it was otherwise ordained, and although those who knew him well, and loved him most, bow in humble submission to the Divine will, they can but feel that "the ways of Providence are inscrutable and past finding out." We are sure that Dr. Sutherland has the sincere sympathy not only of the profession in Montreal, but of hundreds of his old students still living, and scattered throughout the length and breadth of the Dominion. At a meeting of the Medico-Chirurgical Society, held on Friday, the 7th of February, 1873, the following resolution was carried unanimously:—

Moved by Dr. HINGSTON, seconded by Dr. Trenholme, and Resolved,—“That the Medico-Chirurgical Society of Montreal records with deep regret the death of their late friend and associate, Dr. William Sutherland, jun., whom they have ever esteemed as a young gentleman of high character and bright promise; and the members of this Society further extend their heart-felt sympathies to the family of deceased in their great bereavement.”

The Secretary was instructed to forward a copy of the above resolution to Dr. and Mrs. Sutherland.

DR. EDWARD B. GIBSON, M.D.

Dr. Gibson graduated at McGill College in 1864. When a student, he was delicate, and shewed a predisposition to phthisis, which manifested itself about the time of his graduation. For a number of years the disease seemed stationary, but there was never any indication of restored health. We last met him at the meeting of the Canadian Medical Association in Ottawa, in the fall of 1870. He was then in feeble health, and proposed retiring entirely from

practice. His death took place at Pakenham, Ontario, on the 4th of February. Amiable in disposition, he was much liked by those who knew him best.

Reviews.

Surgical Diseases of Infants and Children. By M. P. GUERSANT, Honorary Surgeon of the Hopital des Enfants Malades, Paris; Honorary member of the Societe de Chirurgie. Translated by Richard J. Duglison, M.D., Philadelphia; Henry C. Lea, 1873: Montreal; Dawson Bros.

M. Guersant in this book, gives us the results of his experience while surgeon to the Hopital des enfants Malades, Paris; and in the first chapter gives some useful hints as to the preparation of the patient, performance of operations, and after treatment, not neglecting the all important point of hygiene. He advises, "whenever circumstances will permit, to make a change for the patient from one room to another," as it gives "an excellent opportunity to renew the air alternately in the room which he has just quitted, and which he will re-enter when thus purified and warmed, or not, according to the season." He gives a long chapter on Fractures, going fully into the distinguishing features between those of the adult and the young. According to his experience, fractures of the thigh were the most common, after which came those of the fore-arm. He says that complications are attended with less danger at this, than to any other period of life.

The article on tracheotomy in croup, is the most valuable in the book. In most cases, where the operation is performed, he says, "croup cannot be looked upon as a disease, purely restricted to the larynx or the respiratory apparatus; but very often, though only characterized by the presence of a false membrane limited apparently to the larynx alone, it is caused by a general condition existing in the whole economy, and which, like a poison, infects it with more or less intensity." He gives the indications for the operation and the contra indications very minutely and goes fully into the after-treatment and the accidents that may happen, both during and after the operation. He advances nothing new while speaking of hypertrophy of the tonsils, vesical calculus and the different modes of dealing with it. His opinion on the causes of diseases of the joints, coincide pretty nearly with the authorities on this

side of the Atlantic, in not referring the chief cause to scrofulosis, but we think he might have gone a little more fully into the pathology of hip-joint disease, to which he gives the name of coxalgia. He hardly mentions the operation for excision of the head of the os femoris; in thoractenesis, he does not hesitate to operate early, as he thinks, in most cases, where the operation has failed, it has been due to delay. M. Guersant has given us a good readable book, and it well repays perusal. It is not a systematic work, but treats only of those subjects wherein he has had most experience.

Report of the Inspector and Medical Superintendent of the Asylum for the Insane, at Toronto, for the year ending October, 1, 1872.

The kindness of the Superintendent of the Toronto Asylum for the Insane, Dr. Joseph Workman, has placed on our table the above pamphlet. No one who is aware of the admirable management which is characteristic of this institution, or of the eminent abilities of its Superintendent, as a psychologist, but will be prepared to find in the report much worthy of commendation, and not a little which, although tersely expressed and embraced within small compass, is worthy of close study by all who take an interest in the treatment of the insane. There is much truth in the following extract from page 8 of the Report:—

"It is a mistake to believe that Sabbath-day preaching to the insane is the best means of religious instruction or consolation. Every case of insanity has its own peculiar delusions and requirements, which are to be learned and ministered to only by means of individual experience. A sermon which may be suited to a miscellaneous congregation of sane people, may not be equally profitable to an insane assemblage, however discreetly selected. I have known instances of patients, misapplying, perhaps, the preacher's words, going direct from church service to suicidal attempts. There is one in this house, whose restoration I regarded as consummated, until I had the misfortune of giving her leave to go outside to church. What she there heard horrified her, and has continued to do so. How appropriate the discourse may have been to a congregation free from all taint of insane tendency I cannot say, yet how few congregations may there be in which incubating insanity is absent."

The Report makes allusion to the transfer of warrant patients from gaols, who, it appears, are rapidly

crowding up the Asylum, leaving but few beds for disposal among that class of cases which are likely to be promptly benefited by immediate transference to proper treatment. Evidently our sister province of Ontario suffers in this, as do we in this province, where lunatics are placed in the gaols, and there kept till, in the majority of cases, all hope of amelioration is passed; when a sufficient number are collected, a batch is transferred to the Asylum, there to become a burden to the State for the remainder of their lives.

On the subject of Inebriate Asylums, Dr. Workman thus speaks, and we heartily endorse the opinion expressed:—

"That some provision for the care and proper treatment of inebriates is badly wanted in this province, there can be no doubt; but that these unfortunates are fit inmates of a *lunatic* asylum, every one who has had them in charge must regard as an absurdity and a cruelty. Within twenty-four or forty-eight hours after entrance, they find themselves mixed up with mental wrecks as diverse from themselves as midnight from noon-day sun-burst. Can such association conduce to self-respect or good moral resolve? One fact, at least, is certain; their insane companions are not improved by their presence. Dissatisfied themselves, and too often disposed to magnify the causes of dissatisfaction which the discipline of an insane hospital unavoidably presents, their dissatisfaction becomes contagious. One dipsomaniac may upset the comfort and quietude of a whole ward. Assuredly, the physician whose fate it is to minister to their form of mental disease enjoys no sinecure. He may hourly meet, and parry off, the importunities for liberation of those of lethroned mind, who are easily diverted from one subject to another, and who, by adroit management, may be parted from in smiles and renovated content; but it is not so with the de-alcoholised inebriate. Many of this class, perhaps the great majority, are persons of superior mental capacity and culture, and the asylum physician who tries to liberate himself from the meshes of their logic and plausibility, by any of his stereotyped shiftings of position, finds himself awkwardly at fault. They will hold him to their primary point and purpose, and he must escape from the discussion a discomfited, if not sometimes an irritated, combatant, for they understand how to be offensive. Their insane associates see his disadvantage, and some of them do not fail to rejoice in it."

Reports of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL,

MEETING HELD 7TH FEBRUARY, 1873.

Dr. R. Palmer Howard, President, in the Chair.

Dr. Francis W. Campbell read a paper on a case of acute purpura, which will be found among the original communications.

Dr. Howard remarked that Dr. Parks had discovered excess of iron in the blood of those suffering with purpura hæmorrhagica, and the possibility of this excess having something to do with the disease. Dr. H. said that, in several cases that had come under his observation, iron had been taken for some time before the attack.

Dr. Godfrey stated a case where the disease had followed prolonged immersion in very cold water.

Dr. Trenholme stated that, in the present case, the vegetable diet of the mother was not a probable cause of the disease, as it is well known that the healthiest of children are often found among those who use no meat; but, that it might be due to a diseased state of the blood caused by retarded circulation favoring blood changes, as the umbilical cord was very tortuous indeed.

Dr. Reddy mentioned a case which came under his observation, where he believed iron had been given previous to the attack of purpura.

Dr. Hingston's paper on excision of the lower jaw was received with applause. (It will be found among our original communications.) The patient was present, and presented a healthy aspect, and could speak sufficiently well to be readily understood.

The various modes of dividing the tongue were discussed, with regard to hæmorrhage; when Dr. Hingston stated that, in this case, he had divided that organ with the ecraseur as rapidly as possible.

Dr. Reddy stated he had obtained a good result in a similar case, where a minute was allowed to elapse between each click of the instrument.

Dr. Patton remarked that he had seen free hæmorrhage follow the too rapid division of the tongue, even with Chassenois's instrument.

Dr. Howard stated that true cancer, when removed, always returned; and that he did not believe it could be extirpated.

Dr. Trenholme stated that the modern theory is that cancer, at first, is a *purely local* disease; and

that its extirpation when early removed, was possible.

After a vote of thanks to Drs. Hingston and Campbell, the Society adjourned.

MEETING HELD FEBRUARY 21ST, 1873:

Dr. R. Palmer Howard, President, in the Chair.

Dr. Reddy read a paper on cystic disease of the kidney. The patient was a female, aged 43 years; of large make, having, when in health, weighed 275 pounds. Up to October, 1871, her health was good. In May, 1872, she had consulted Dr. Godfrey, who diagnosed a tumor of right side, and advised a visit to the sea side. She went to Portland, where she consulted an eminent practitioner, who ordered croton oil liniment, which gave her relief. When first seen by Dr. Reddy, the face was emaciated and of an olive tinge; much care-worn, and walked slowly with a rotary motion. On sitting down she had difficulty in rising, and complained of pains along her thighs to her knees. The body was considerably wasted, and the muscles were soft and flabby. About two inches below the umbilicus was a nodular tumor, extending up to the pancreas. The first diagnosis was cancer of the liver and spleen. The patient suffered a good deal from headaches and nausea; a severe attack of the latter occurring about last November, when iced soda-water gave very great relief. The patient voided normal quantities of urine; but it frequently assumed the appearance of porter. Dr. Howard, who saw the case in consultation, believed it to be a case of Farr's tubercle of the liver, and in this view Dr. Reddy concurred. The tumor was hard and unyielding, and there was not any pain on handling it. On the 20th of last January there was a return of the vomiting, when peptoidin was ordered and taken with very great relief. She became, about this time, exceedingly restless, and chloral was administered in fifteen grain doses, with benefit. About the 8th of February the voice became husky; on the 9th, there was complete aphonia; on the 10th, there was great difficulty in breathing, pain in the larynx, and inability to swallow liquids; on the 11th, she had all the appearance of being in the last stage of croup; and she died early on the morning of the 12th.

On making an autopsy, two cystic bodies were found extending from the sixth rib to the crest of the ilium, and, on removing them, they were found to be the kidneys. The left kidney weighed four and one half pounds, the right kidney four pounds and half an ounce. The pancreas was healthy, as

was also the liver, which was pushed upward and backward.

The kidneys were exhibited to the Society, and were examined with great interest by the members.

Dr. Godfrey said that when the patient returned from the sea-side she again consulted him. She complained of rheumatic pains and inability to walk. She had a great fear of falling down stairs, from this inability to walk properly. When he discovered a tumor he believed that it was cancer of the liver.

Dr. Howard said he had to confess he was surprised when he was told that it was cystic disease of the kidneys. As stated by Dr. Reddy, he thought it a case of cancer of the liver; one of the grounds of his diagnosis was, that the enormous tumor was quite superficial, there being no intestines between it and the abdominal walls. It did not carry the intestines before it as renal tumours are said to do. Dullness was also continued up to limit of upper line of dullness. Another peculiarity of the tumor was its great mobility; both could be moved about with ease, while malignant disease usually fixes the kidney. As regards the origin of the disease, he believed it was congenital, and that the cysts had been growing from childhood. He was inclined to this view because it was a well-known foetal disease; one case being recorded, where a child was with difficulty brought into the world, from the size of both its kidneys.

The Report of the Committee on Fees was then taken up, and discussed; a large number of the suggestions being unanimously carried. The consideration of the balance of the report was postponed till the next meeting.

A vote of thanks having been passed to Dr. Reddy, the Society adjourned.

DIED.

In Montreal, on the 6th February, Alfred Nelson, Licentiate of the College of Physicians and Surgeons of Lower Canada, aged

In Montreal, on the 29th January, William Sutherland, jun. M.D., aged 26 years, son of William Sutherland, M.D., formerly Professor of Chemistry in McGill College.

In Montreal, on the 20th February, Diana Caroline, beloved wife of Chas. Smallwood, M.D., LL.D., D.C.L.

At Pakenham, Ont., on the 4th February, Edward Bowel Gibson, M.D., in the 33rd year of his age.

In Hamilton on the 7th February, George Donnelly, Esq. M.D., aged 39 years.

MONTREAL:

Printed by JOHN LOVELL, No. 23 & 25 St. Nicholas Street

Original Communications.

The Muriate Tincture of Iron in Epistaxis and Hæmoptysis. By JAMES PERRIGO, A.M., M.D., M.R.C.S., Eng., Demonstrator of Anatomy University of Bishop's College, Montreal.

— was called, Nov. 10th, 1872, to see a case of epistaxis in a widowed lady aged 38, who was a subject of aortic valvular disease and also of tuberculosis of apex of the left lung. This lady had previously been under my care for the latter two affections, but I had not seen her for some time owing to her comparatively fair health. Before I could reach her, she had fainted twice, and on arrival her condition presented the most alarming symptoms. Her nose had been bleeding for three hours before she would consent to allow the messenger to come for me. The bleeding was most profuse from the right nostril and very little from the left.

An injection of *ti-ferri-mur*, of the strength of one to two, was used, and in a short time the bleeding stopped. Gallic acid and opium were ordered, 10 grs. of the former and $\frac{1}{2}$ gr. of the latter, to be taken every four hours.

Three hours afterwards I was again sent for, as the hemorrhage had returned to an alarming extent, and now from both nostrils.

Considering the amount of blood lost and the delicate constitution of the patient, the anterior and posterior nares were plugged without delay. The plugs used were pieces of sponge well soaked with *ti-ferri-mur*. In plugging, emesis occurred, and she vomited a large quantity of blood that had been swallowed. She now told me that there had been some hemorrhage during the night. Three years ago, she had an attack of epistaxis, but which was not so serious as this. After vomiting this blood, there was a good deal of straining, which must have ruptured some small capillary vessel in the diseased lung, as slight hæmoptysis occurred.

The stomach was so irritable that milk and essence of beef in the smallest quantities were rejected.

Her condition at this present period could not have presented a worse aspect. The pulse was 148, temperature 106.1-5, lips blanched, great restlessness, continual sliding from the pillows to the foot of the bed, and hiccup.

Prussic acid was ordered in order to allay the irritability of the stomach, and the *ti-ferri-mur* was given every hour in ten minim doses. For the next two hours, milk and beef juice in teaspoonful doses were taken and rejected, but the *iron was retained*.

During the night, a senior student sat up with her and superintended the nursing. Next morning there was a perceptible improvement, pulse 130, temperature 104, but the patient still very restless. Food retained. This condition existed during the day, but in the evening she seemed to lose ground, caused probably by the excitement of making her will during the afternoon. A little blood oozed through the sponges plugging the anterior nares, but not enough to warrant disturbing them. I superintended the nursing myself during the following evening. The iron all this time was being given every hour. A teaspoonful of brandy and water was allowed occasionally, but was never repeated oftener than once in five or six hours. During the night in question the patient had a little sleep, and in the morning said she felt much better. Improvement from this out was gradual and lasting.

Considering the nature of her constitutional disease, this lady was possessed of wonderful recuperative powers. The iron in her case seemed to act as a specific. Since having her case, I have had two of hæmoptysis of considerable severity, with great irritability of the stomach in each case. The patients were both delicate young French lads, and both of dissipated habits. In one I followed the usual treatment, and in the other gave the iron every hour as I did with my case of epistaxis. The one to whom I gave the iron made a more rapid and a better recovery, better in as much as during convalescence he regained his strength more quickly. The iron here also acted admirably.

My friend, Dr. Slack, has related cases where the same drug did all that was desired; one, that of a coachman where all other remedies failed and the iron was given in 15 minim doses every fifteen minutes with perfect success. He made a good recovery, and was able to go out in a few days.

It is strange that iron when given so frequently in such cases should be so well retained, even by the most irritable stomach, while in some forms of anæmia, it is not so well borne. In my three cases, it seemed to manufacture blood as soon as lost.

Two years and a half in a London General Hospital. By G. F. SLACK, member of the Royal College of Surgeons, London, late House Surgeon, Charing Cross Hospital.

(Number Four.)

Of late years we have heard so much about carbolic acid, its use has been so strongly recommended in such a multitude of ailments either as an external application in varying strength, in the form of an aqueous solution, or in combination with other drugs

or materials, or as an internal remedy, that the minds of many medical men have been turned against it, either from the want of a careful and sufficient trial of the remedy for themselves or, what is more frequently the case, from the ridiculous exhibitions which they may have witnessed in some few of the operating theatres in the old country. The plain, simple and common-sense use of the drug as manifested in the following selected cases may be interesting to those who have been nauseated by one of the exhibitions alluded to above.

Case 1.—A volunteer, age 45, stout and healthy, while trying to wrench a rifle from one of his comrades, received a bayonet wound of the knee joint, the point passing under the patella from above downwards. He was brought by boat from Battersea Park to the hospital. There was slight bleeding with a considerable escape of synovial fluid. The limb was fixed on a back splint with a foot-piece, and the wound was covered with a pad of lint soaked in a solution of carbolic acid. The man was very feverish for a few days, and delirious for about 24 hours, but after that the pain and swelling gradually subsided, and in three weeks the man walked out of the hospital.

Case 2.—A boy, about eight years of age, was found by a policeman sitting on one of the steps leading to the Thames embankment, holding his knee. The policeman brought him to the hospital, when it was found that he had in some unaccountable way received a deep, clean cut, shaving the upper border of the patella. He could give no explanation of how he met with the accident. The edges of the wound were brought together with silver sutures, and a pad of lint soaked in a solution of carbolic acid was applied. In a fortnight the boy was quite recovered.

Case 3.—A girl, ten years of age, was knocked down by a passing cart. She received several bruises, but the chief injury was on the inner side of the knee-joint, where there was an opening, the size of a penny, grimed with dirt, caused by the knee being bruised against the pavement. The leg was bandaged to a back splint, and the wound, from which it was impossible to wash the dirt, was covered with three or four folds of lint soaked in a solution of carbolic acid, and kept constantly moist with a similar solution by the following means: a bottle containing the solution was fastened to the top bar of a cradle, and hanging from it was a narrow strip of lint, from which drop by drop the solution fell over the lint covering the wound. For six weeks the dressing was not touched. There was an immense amount of discharge which

worked its way from under the lint, but the child's general health continued remarkably good throughout, although the smell was very offensive. At the end of that time, the dressing and splints were removed, and the wound found to be quite healed. The child moved about on crutches for a few days, and then left the hospital as well as ever.

Case 4.—A farmer's boy, age 18, amusing himself with a gun, allowed it to burst in his hand. The result was the palm of one hand was split and torn in every direction, and the fingers were cleaned to the bone. The hand was bound up in lint soaked in a solution of carbolic acid, and bandaged to a splint. Opium was given in large doses and frequently to ease pain, and in a month he had recovered, the distal phalanges only being lost.

Case 5.—A boy, age 11, the son of a railway guard at Clapham Junction, in attempting to jump on a carriage in motion, fell and had his left foot crushed. All the bones with the exception of the calcæ and astragalus, were either fractured or displaced. The surgeon under whose care he was placed decided to try what nature aided by carbolic acid would do for the boy, for the reason that, if any operation had been performed it would have been amputation of the leg, as the soft parts were so badly bruised as to render any operation of the foot or ankle impossible. The foot was covered with lint, and kept constantly moist in the manner referred to above. All the phalanges and all the metatarsal bones except that of the great toe gradually became separated from the healthy tissues, and came away. The parts then rapidly healed, and at the end of two months the boy left the hospital with a very useful foot.

Case 6.—A carpenter, age 47, thin and delicate, working at the London and Westminster Bank, feeling the platform under him giving way jumped backwards to the street, a distance of at least twelve feet. He was unable to rise, so his master brought him to the hospital. On examining his right foot, the astragalus was found to be dislocated forward and a little outward and turned upside down, the lower part being slightly fractured. There was no wound of the skin, but the parts were so tense and the bone so completely out of place that the surgeon decided to remove it, which he did at once and every easily by a single incision over the bone. The edges of the wound were brought together with wire sutures, the limb was bandaged to a back splint with foot-piece, side splints being afterwards applied to render it more secure as he was a very nervous, fidgety man, and a solution of carbolic acid was kept constantly drip-

ping upon the lint covering the wound by the means of the bottle and strip of lint. There was slight bleeding for 24 hours with occasional shooting pain and slight feverishness. For seven weeks the dressings were not in any way interfered with, the man during that time enjoying perfect health, suffering no pain, sleeping and eating well. On the 49th day, the splints and dressings were removed, revealing the following state of things: about a dessertspoonful of pus, the wound completely filled up, a narrow line of exuberant granulations marking where the incision had been made, and an ankle firm and natural looking, with a slight amount of motion. With the aid of a boot half an inch thicker in the sole than the other, he was able to walk very well.

Case 7.—A thin strumous looking lad, 17 years of age, was admitted with disease of the cuboid. The bone was removed by a crucial incision the case, and was treated in a manner precisely the same as the last case alluded to. The boy suffered a good deal of pain, but when the dressing and splint were removed at the end of six weeks, the hole had completely filled up, the wound healed, and after a few days on crutches, the boy walked out as well as ever.

Case 8.—A little girl, age 10, was sent up from the country, with disease of the calcis. A semilunar flap was made from below upwards over the bone, and the diseased part, about the size of a walnut, was gouged out. The wound was covered with lint, the limb bandaged to a splint, and treated as described in the preceding cases. The discharge was very slight, no pain whatever, and at the end of five weeks the child was perfectly well.

Case 9.—A puny little boy, of eight years of age, was admitted with disease of the ankle-joint. The joint was excised in the usual way, and the after treatment was exactly the same as described above. At the end of two months the dressings were removed. Nothing but a surface sore remained, very fair union had taken place, and during these two months there had escaped not more than two ounces of pus.

Case 10.—A young man about 19, had a large fatty tumor removed from the back of his neck. The edges of the wound were brought together with silver sutures, a pad of lint soaked in a solution of carbolic acid was applied, and not interfered with for four days. At the end of that time, perfect union had taken place.

I could go on enumerating case after case, but I think those already given suffice to show that the plain and simple use of an aqueous solution, of a

strength varying according to the case from 6 to 12 grains of crystals to the ounce of water, will prove quite if not more efficacious than the elaborate messes with putty and oil, etc., to say nothing of the spraying the patient as well as the surgeon during the operation and other manœuvres too numerous to mention, all of which have tended in a great measure to bring the use of carbolic acid into ridicule. In most London hospitals, such a solution is always kept at hand, both in the accident room as well as in the out-door surgical department, and all cases of wounds, etc., unless special orders are given to the contrary, are dressed with this solution. Unless there was some virtue in it, such a practice would not have been kept up for so many years under the directions of some of the ablest surgeons in the world.

To be Continued.

On the use of Alcoholic Stimulants by Nursing Mothers. By WILLIAM E. BESSEY, M.D.

Perhaps there is no more grave or pernicious error in the modern practice of physic than the habit of recommending the use of alcoholic stimulants to nursing mothers. It is unsound in principle, unwise in practice, and must appear, on a little observation, to an unbiased mind, to be not merely unsafe but positively harmful and pernicious in its influence upon both mother and offspring.

It is wrong in principle because administered or recommended as it is, to improve and augment the lactic secretion in the mother, it holds out a promise of being able to effect—in what way we are not told—an improvement in both the quality and quantity of the mammary secretion. How or in what manner has never been explained. The whole theory is a fallacy based upon mere assumption, and unsupported by the practical tests of observation and experience.

It is true that alcohol, and especially malt liquors, are powerful stimulants to the glandular organs of the body, although invariably followed by a state of reaction corresponding with the degree of excitement by which it had been preceded. The excitement thus produced in the mammary glands is, of course, attended with an increase in their secretion; but this has reference only to the quantity—an increase in the watery portion of the fluid takes place undoubtedly; but the caseine, on the contrary, or muscle-making element in the secretion, is diminished. This may be verified by any one who may be disposed to take the trouble. Alcohol, pure and

simple, also exists in the milk of women making use of alcoholic beverage of any kind; and by its presence there, being imbibed with the lactiferous secretion, it injures the delicate membrane of the child's stomach, lays the foundation of a future appetite for strong drink, and is productive of the most serious disorders which belong to infancy and childhood.

Upon the analysis of the milk of a nursing woman, after allowing for the effect of the various circumstances which may affect the relative proportions of the several constituents of the healthy human milk, such as age, temperament, period of lactation, position and circumstances in life, food, drink, &c., it will be found that the healthy quality of the secretion has been much deteriorated.

In milk of healthy women the water may range from 879 to 905; the solid constituents from 120 to 94; butter from 25 to 42; caseine from 15 to 39; sugar of milk from 31 to 45; salts from 1 to 4 parts in 1000. These proportions are materially altered by the use of Alcoholic beverages.

On the analysis of the milk of the same woman, a few hours before and after the use of a pint of beer, it has been found that the alcohol increases the proportion of water, and diminishes that of the *caseine* or curd, which is the muscle-making or nourishing element, and the presence of alcohol is very perceptible. As to the diseases produced by the influence of lactation vitiated by alcohol, Dr. Inman, of Liverpool, in his "New Theory of Disease," (1861, p. 44,) admits that, from this cause, "children have suffered severely from diarrhoea, vomiting and convulsions. I have known a glass of whiskey, to-day, taken by the mother, produce sickness and indigestion in the child twenty-four hours thereafter." Dr. Edward Smith, F.R.S., London, in his "Practical Dietary," (1865, p. 162,) says: "Alcoholics are largely used by many persons in the belief that they support the system and maintain the supply of milk for the infant; but this is a serious error, and is not an unfrequent cause of fits and emaciation in the child."

I have seen a case reported in the *Newcastle Express*, (England,) of the proceedings at an inquest at Monkwearmouth, where a surgeon stated that the child "had suffered from chronic inflammation of the bowels." And the coroner added that, "there was no doubt the child had died from convulsions arising from inflammation produced by taking the alcohol in the mother's milk."

So long ago as 1814, Sir A. Carlisle, the celebrated surgeon, said of fermented liquors: "The

next in order of mischief is their employment by nursing women, a common occasion of dropsy in the brain in infants. I doubt much whether the future moral habits, the temper and intellectual propensities, are not greatly influenced by the early effects of fermented liquors on the brain and sensorial organs."

That the vitiated milk secreted after using malt liquors may be productive of wasting chronic diarrhoea in infants, I am convinced, by repeated observations. I will relate a case in point, which occurred in my own practice. A mason's wife, in all respects a healthy-looking woman, consulted me in the autumn of 1867, in behalf of her child; seventeen months old, which had been suffering from chronic diarrhoea of an irritable character for the whole summer. It was the most haggard-looking and emaciated creature I had ever seen, and wore a remarkable senile expression of countenance. Its abdomen was very large, distended and tympanitic from flatulence. The skin hung in loose folds upon its emaciated frame, and its front teeth were already much decayed, giving a more ancient and haggard expression to the face. The child, I was told, was still nursing, and would not take nourishment. She added, however, that she had *kept it up* for some time by giving it, at first, a wineglass, then half a tumbler of porter, three or four times a day, and she drank freely of porter and ale herself, by her former doctor's orders, to enable her to keep up a liberal supply of good healthy milk, as she said. She took three pint bottles each day. She had consulted the best medical talent in the city, and was informed that, as the child was tuberculous and of unhealthy constitution it was a case incurable, but advised a continuation of the stimulants and the use of ale herself, to keep up the supply of milk. I regarded the case, at first, as one of starvation or inanition, from mal-assimilation; but, upon examination of the milk of the mother, upon which the child had been entirely dependent for nourishment, I found there was next to nothing in it to assimilate. It was almost entirely destitute of caseine or curd; the fatty matters were plentiful enough, but the quantity of sugar of milk present, I did not determine, as I have since wished I had done. In one specimen there was a sensible odour of alcohol; but in another, its presence could not be detected. Regarding the case now as one of *non-prehension*, instead of *non-assimilations*, before, I recommended an immediate change of nurses, and, although comparatively poor, the anxious mother at once fell in with my recommendation, and obtained a healthy

young woman as nurse from the Lying-in-Hospital, who nursed the child for three weeks. The nurse complained that, at first, the child was perfectly ravenous, and nursed too severely. However, it soon became satisfied, and gradually assumed a more natural appearance. Without any medicinal aid at all the diarrhoea gradually ceased, and at the end of the three weeks the child had lost its meagre, starved appearance, and would eat other food. They now continued to furnish it with more solid food and plenty of cow's milk, and the child grew strong and flourished. This is, although a strongly-marked case, only one of hundreds, which go to prove the impoverishing effect of alcohol upon the *feeding* and *nourishing* qualities of human milk. And I have no doubt many of the cases of presumed hydrocephalus from previous tubercular deposit, diarrhoea from accountable irritation of the *prima-viæ*; renal dropsy from nephritis or congestion; stagnation or impediment to the pulmonary circulation ending in congestion or bronchial affection; are directly traceable to the poisonous action of alcohol, either imbibed in the milk of mothers making use of fermented or malt liquors, or administered directly in the form of weak slings for the relief of wind-colic or some other presumed cause of restlessness. or as a diuretic, not to speak of the manner in which an occasional case is found to have been "strengthened" by the direct administration of porter or ale.

That the administration of alcoholic beverages and over-feeding together with a total changes in their accustomed diet is the cause of failure in numerous cases of hired nurses, there is, in my mind, not the slightest question; besides, deprave the whole being of the nurse to the extent of their besotting influence, and affects, in a similar manner, the child, by the directly injurious effect of the imbibed spirit upon its delicate brain tissue, laying the foundation of mental degradation and moral depravity.

On this point, Dr. Ellis, in his work entitled, "Avoidable Causes of Disease," says: "A frequent cause of failure in the secretion of milk is to be found in the use of an unusually stimulating diet, including fermented liquors, under the plea of having to support two. This is especially true of hired wet nurses when they are taken into the families of the wealthy. The change of diet from a coarse, plain, perhaps rather scanty diet, to rich stimulating food, with free use of meats, malt liquors, and often unusual in-door confinement, is sure to make the system feverish and lessen the quantity of milk as well as to impair its quality. In all such cases, instead of seeking to increase the milk by the addi-

tion of porter or ale, which disorder the stomach vitiate its secretions and promote indigestion the nurse should be put upon plain coarse diet, as near like what she had formerly used as possible, and she should be required to take active exercise, especially walks in the open air."

It may reasonably be supposed that Plato was cognizant of the fact twenty centuries ago, that even in the very womb alcohol perverts the brain of the unborn child, and strikes a blow at reason and at virtue, when we find that he forbade the use of wine to the newly married.

And does not common observation bear me out in the assertion that, with few exceptions, depravity is stamped, like the mark of Cain, upon the foreheads of the posterity of drunken parents, especially where the mother has been a victim to the habit, or has been in the habit of using aleoholics. Then why, amid the boasted enlightenment of this nineteenth century, and under the most favorable circumstances of our Anglo-Saxon civilization, should we, the members of an honorable profession, thus go on favoring the production of a future race of vicious and criminal persons, by recommending to mothers the use of that which can only injure and debase her infant, and may possibly degrade and besot herself.

There is a modern philosophy which teaches truly that the way to stop crime is to change the character of our reproductions, and that this is to be done by abolishing the condition of things which generates rascals. Formation, rather than reformation, is needed, *i. e.*, form the children to right models from the beginning, so will society save itself and physically regenerate the world.

Concerning the use of alcoholic stimulants by nursing mothers, Dr. Lees, F.S.A., says: "It is the real cause of so many ill-balanced minds, neither insane nor sensible; and, in its higher use, it is the teeming fount of the sad idiotcy which depresses and disgraces our boasted civilization."

Can further argument be needed to convince medical men of the great responsibility assumed in thoughtlessly recommending a plan of stimulating this glandular secretion which is capable of working so much mischief, both directly and indirectly, upon the whole future of the persons coming under its influence.

It is an acknowledged axiom in all rational medicine that we should always follow nature as closely as possible. This being the case, I think a glance at the animal kingdom, and a consideration of the habits of the mammalia, will be sufficient to convince any one that the animals of this class—the

cow, the goat, the mare, the dog, the cat, etc., require no artificial drinks or stimulating alcoholics to produce in them an abundant secretion of healthy milk; but, on the contrary, pure water, an abundant supply of healthy food, with fresh air and exercise, is all that is required. Let us secure at least this much for our patients, and omit alcoholics, over and unwholesome feeding, with impure air and want of exercise, and I will be responsible for results. Carrying out our comparisons with nature, or the lower animals, I would say that I think no one would venture for one moment to maintain that the milk of cows fed upon *disstillingslops* or *brewery grains*, is equal in quality, although greater in quantity, than that of animals fed upon grass and hay or other natural food; and to whom pure water is freely accessible, and who have free exercise and open air. It is, indeed, a well-known fact, that cheese *cannot* be made from such milk at all; the alcohol given to the animals in such food has impoverished the secretion of its *casein* or curd. On this subject Dr. Harley writes: "I have observed that, if a woman who is nursing eat heartily, but not immoderately, of plain food, avoiding that which is stimulating, she will, generally speaking, preserve her health, the result of which will be a healthy secretion of milk." And Dr. Condie, author of "Diseases of Children," says: "The only drink of a nurse should be water—only water or milk. All fermented and distilled liquors, as well as strong tea and coffee, she should strictly abstain from. Never was there a more absurd or pernicious notion than that wine, ale or porter, is necessary to a female while giving suck, in order to keep up her strength or to increase the quantity and improve the nutritious properties of her milk. So far from producing these effects, such drinks, when taken in any quantity, invariably disturb, more or less, the health of the stomach, and tend to *impair the quality* and *diminish the quantity* of nourishment furnished by her to the infant."

In short, the more simple the diet and manner of life pursued by the mothers of a people, the more healthful and successful will they be as mothers, and the better or higher will be the physical condition of the race which owes to them not only being itself, but also, in a very large measure, the character of the physical condition and vital powers with which they are endowed.

Dr. Wm. B. Carpenter, F.R.S., (now President of the British Medical Association,) says on this subject: "The regular administration of alcohol with the professed object of supporting the system under the demand occasioned by the flow of milk, is

a mockery, a delusion, and a snare. For alcohol affords no single element of the secretion, and is much more likely to impair than to improve the quality of the milk." "Under no circumstances, therefore, can we consider that the habitual, or even occasional, use of alcoholic liquors, during lactation, is necessary or beneficial."

Dr. McNish, in a few plain words, lets us have his opinion on this subject. He says: "If a woman cannot afford the necessary supply without these indulgences, she should hand over the child to some one who can, and drop nursing altogether." In such cases, where a nurse cannot be obtained, a much more judicious course is to support the child upon goat's milk, or, if that cannot be obtained, cow's milk, to which a little sugar and water has been added. I am totally averse to feeding children with solid food too soon, which overloads the feeble stomach, induces indigestion and often convulsions. I think nature plainly indicates the time when children are able to take without injury and digest solid food, by the appearance of the primary teeth; not before, but that up to that time nothing but milk diet should be given, from which none of the evils of indigestion, such as convulsions, diarrhoea, etc., are to be anticipated.

The innumerable flours, baby foods, pennadas and concoctions ignorantly fed to infants before the stomach has matured sufficiently to digest them, is, in my opinion, a fruitful source of infantile disease and mortality.

It has been asserted, and it is an undoubted fact that has been exemplified in the histories of thousands of families, that the children born after their parents have become abstainers are not only physically healthier, but mentally brighter and better than those born before. There can be no question about the fact that the offspring of drunkenness is a lower type of humanity—both physically and mentally than that of sobriety—and the degree of intellectual and moral elevation or degradation in the parent is, of necessity, imparted to the child, so that the children of a family are often true character representatives of Philip drunk or Philip sober; Philip singing or Philip sulky. At the same time, however, the mother, from her long connection with the child, has a greater influence upon its prenatal existence; and, consequently, her emotional nature is found to be most largely stamped upon the new existence, while the intellectual faculties, which are later in being developed, may more largely partake of the character of the father. Indeed, so great is the mother's influence over the offspring, both before

and after birth, that it has passed into a proverb, that "the mother moulds the man." Thus the most distinguished men of history have been men born of noble women. By this digression, I wish to make it appear how important it is—the connection being so intimate and the influence so perceptible—that the faculties of the mother should be clear, active and elevated in their tendency; instead of being kept in a state of chronic semi-stupor, accompanied by a depraved temper, and a state of chronic irritability of the system from the constant habit of imbibing alcoholic stimulants; whether, ale, porter, wine, gin or whiskey.

The evil effect is exerted upon the offspring in three ways: First, by deteriorating the quality and lessening the quantity of caseine in the milk, thus producing a slow degree of starvation of the albuminous tissues; the sugar and butter being also diminished in quantity, the child becomes emaciated, and its natural temperature has to be kept up by an increased supply of warm clothing in the absence of a lively action of the internal furnaces. Second: By the presence of alcohol in the pure state in the child's food, it is absorbed and acts injuriously upon the sensitive brain structure and nervous system and prevents a healthy development; favoring a lower form of cell growth, and consequently tissue structure, than nature, if supplied with healthy materials, would have furnished in the part. In this way, an inferior quality of brain is developed with an inferior caste of mind; a depraved tendency is given to the developing passions; an irritability and peevishness of temper, or, in other cases, a stupid vacuity of expression with defective memory and a general obtuseness or listlessness is developed. It is also well to remark here that the imbecility or idiocy of children may often be traced to the drinking habits of their parents. In support of this, I quote from a report of the Inspector of Prisons and Asylums of the State of Massachusetts (Dr. Howe), from which it appears that 145 out of 300, or nearly one-half of all the cases of idiocy and imbecility among children had drunken parents.

Third: By its direct action upon the delicate brain substance of the child it produces a state of chronic irritation, or sometimes subacute inflammation, leading to and often ending in hydrocephalus; or the action upon the delicate brain structure and nervous system may be of a different nature, and convulsions, paralysis, or chorea, may ensue.

In support of the statements I have advanced,

that children of drunkards are physically degenerate, I may quote from *Morel*, who states that "the degenerating effects of alcohol upon the system ultimately influences the procreative functions; in some by diminishing the vital standard of the offspring, and in others by *annihilating* the generative powers altogether." These are not the only bad results, for we find it asserted—and every-day observation confirms it—that the love of strong drink and alcoholic abuses are hereditary and transmissible. *MOREL*, in his "*Traité des degenerescences physiques, Intellectuelles et Morales, de l'Espèce Humaine, etc., etc.*," (1857), not only shows that the vice of drunkenness is transmissible, but proves also that imbecility, congenital or early acquired idiocy, and other more or less complete arrests of development of the body and intellectual faculties, indicate the existence of children who have acquired the elements of their degeneracy during intra-uterine life. He points out eight different directions in which the degeneracy of the species from the influence of alcoholics is demonstrable. Of these, I may cite "The general diminution of the intellectual powers with the manifestation of the most depraved immoral tendencies." "The increase in the inmates of asylums and prisons," and "The increased development of nervous affections, especially of a paralytic and convulsive character." And to this I may add, as a result of my observations, that children, of drinkers, exhibit a predisposition to neuralgia. But not only is the vice of alcoholic abuse hereditary transmissible, (as shewn by *Morel*.) but it also frequently leads to insanity in the offspring of the drunkard. (*Whitehead Adams*)

That an agent, whose action upon the subject is productive of such degenerative changes, should receive the sanction of medical prescription is, of itself, matter of surprise; but, that it should be so prescribed on the basis of false assumptions and fallacious theories, is matter for regret. And in no instance is the recommendation of alcoholic beverages more reprehensible than to pregnant or nursing mothers.

In conclusion, I will quote the writings of a few others on this subject. *Dr. Trotter* says: "The food of women who suckle their own children is often very improperly selected. The quantity of the milk not the *quality* is studied. It is a well-known fact that this secretion partakes very much of the nature of the diet used, *i. e.*, certain particles pass through the breast unassimilated. All drinks containing ardent spirit, such as wine, punch, ale and porter, must impregnate the milk; and thus the

digestive organs of the babe must be quickly injured."

Dr. Andrew Combe says: "If any mother should be unconvinced of the propriety of adhering to a simple and unstimulating diet while acting as a nurse, I would earnestly direct her attention to the unquestionable fact, that the best and healthiest nurses are to be found among women belonging to the agricultural population, who, although actively employed and much in the open air, scarcely ever taste fermented liquors of any kind, but live principally upon soups, tea and vegetables and farinaceous food. Among mothers so circumstanced, it is rare to meet with one who experiences any difficulty in nursing her child; while many have milk enough for a second."

Dr. Conquest says: "There is an evil too generally prevalent and most pernicious in its consequences upon individuals and on society; which cannot be too severely reprobated; it is the wretched habit of taking ale, wine or spirits to remove the langour present during pregnancy and suckling. It is a practice fraught with double mischief, being detrimental to both mother and child. The relief afforded is temporary, and is invariably followed by a greater degree of langour, which demands a more powerful stimulus, which at length weakens, eventually destroys the tone of the stomach, deteriorates the milk, and renders it altogether unfit to supply that nutriment which is essential to the existence and welfare of the child."

Dr. Bull says: "The practice of giving wine, beer, or indeed any stimulant to a healthy child, is highly reprehensible."

Mr. Courtney says; "I have under my own eye many mothers who are experiencing the ill effects of the moderate (not the immoderate) use of these falsely denominated 'strengthening' beverages, in the form of liver and stomach complaints, skin diseases, asthma, dropsy, etc., and every impartial and observant member of the profession must have noticed similar results. Thousands of children are annually cut off by convulsions, diarrhoea, etc., from the effects of these beverages acting through the mother."

It is unnecessary to accumulate the testimony of others upon this matter, suffice it to say, that the impartial, intelligent and observant physician will have little trouble in deciding against the use of any form of alcoholic beverage for this class of persons; and I hail with satisfaction the growing feeling against alcoholics as a class of remedies and alimentary substances, and in no instance would I hail

their entire abandonment with greater delight than in the case of nursing mothers, whose habitual use of fermented or other liquors is, in the majority of instances, followed by what I cannot designate by any milder term than "a slaughter of the innocents."

Seeing, then, that alcohol is an agent whose synonym is *death, degeneration, decay*; whose effects upon the human system, either in embryo or in infancy; in adolescence, adult years, or old age; is productive of changes the opposite of life, growth, and repair; and, as I have endeavored to show, is deleterious in its action upon both mother and child, during the period of nursing—degrading and brutalizing both to a degree in strict proportion with the degree of indulgence. In view of these facts is it too much to expect of a philanthropic and learned profession that they will *at least* withhold their sanction from all those man-cursing, death-dealing compounds of which *alcohol* is the active principle.

Progress of Medical Science.

ON THE TREATMENT OF COMMENCING CHRONIC DIARRHŒA IN YOUNG CHILDREN.

By Dr. Eustache Smith, Physician to the North West London Free Dispensary for Sick Children, etc.

[Chronic diarrhoea in young children not unfrequently begins very insidiously, owing to a slight chill, or a meal of improper food. A chronic catarrh is often induced which becomes less and less amenable to treatment the longer it continues. Frequently, however, the purging speedily ceases, and the child appears to have recovered. The motions, however, are not healthy, they are large, sour, and pasty-looking. The child gets pale, is occasionally sick, and his breath is sour and offensive. After some weeks or months, during which he has got thinner and paler, the child is seized with an attack of purging, which becomes more severe, he loses flesh rapidly, and his state becomes one of great danger.]

These cases are often looked upon as instances of disease of the mesenteric glands, but the most careful examination of the belly will seldom furnish any satisfactory evidence of glandular enlargement. The temperature is lower than in health, and seldom rises higher than 98° Fahr. in the rectum. There is no particular desire for drink. The child is a little restless at night; he takes his food with a considerable appetite, and even sometimes with voracity; the food, however, does not nourish him, and appears hardly changed in the stools.

These cases, obstinate as they prove when not treated judiciously, will yet yield quickly to suitable measures; and unless the weakness and emaciation are very great, do not as a rule present any great difficulty in their management.

The object of the present paper is to describe the method of treatment applicable to these cases during

the period, often sufficiently extended, before the diarrhoea has become confirmed; when the child is becoming more and more listless and pale, is losing flesh and strength, while his motions, infrequent but copious, exhibit the characters which have been described above.

The presence of undigested food in the motions of a young child, especially if that child exhibits evident marks of deficient nutrition, is a sign that the diet is an unsuitable one and requires alteration. Whether the digestive weakness be a simple functional derangement, or be due to the existence of organic disease, in either case our object is the same—viz., to adapt the child's diet to his powers of digestion, so that the food he swallows may afford him the nourishment of which he stands in need, and may leave as little undigested surplus as possible to excite further irritation of his alimentary canal. In such cases, however, this accurate adaptation of diet is often by no means an easy task. Articles of food on which we are accustomed to rely, and from which a healthy child derives his principal support, will here often fail us altogether. Thus, farinaceous food should be given with the utmost caution, and will seldom be found to agree except in very small quantities. Even milk, our great resource in all cases of digestive derangement, in children, must be sometimes dispensed with. It is not so very uncommon to find cases where milk, whether diluted with water, or thickened with isinglass, or with farinaceous food, cannot be digested. So long as it is taken, the pale putty-like matter of which the motions consist, and which is passed in such large quantities, is evidently dependent upon the milk diet, and resists all treatment so long as that is continued. In such cases, which occur most commonly in children between one and two years of age, the milk must be replaced either wholly or partially by other foods.

Although farinaceous food is not as a rule well borne in these cases, yet Liebig's farinaceous food for infants (as prepared by Mellin of "Liebig's Patent Concentrated Milk Company") may always be tried, and seldom disagrees even with the youngest infants. In its preparation the starch of the wheaten flour, which forms one of its constituents, is already converted in great measure into dextrine and grape sugar, so that the most important part of the work of digestion is performed before the food reaches the stomach.

Whatever be the diet adopted our object is to keep up the nutrition of the body with the smallest possible amount of irritation to the alimentary canal; and the food, whatever it may be, which will produce this result, is the food best suited to the case. Without attention to this point little good can be effected by the use of drugs alone. The successful adjustment of the diet, an adjustment in which the quality and quantity of food to be allowed for each meal are accurately adapted to the powers and requirements of the patient, is a matter which can be properly learned only by experience, and which often makes large demands upon the tact, the ingenuity, and the patience of the medical attendant. This expe-

rience every one should labor to acquire, for without it success can seldom be attained in the treatment of the chronic functional derangements of young children.

In all cases, if the patient be a sucking child, he should be limited strictly to the breast; or if he have been only lately weaned, the breast should be returned to. If from any reason a return to the breast is impossible, our great trust should be placed in cow's milk, more or less copiously diluted with lime-water. With children under a year old milk is very seldom found to disagree. If the child be no more than six months old, nothing should be allowed but milk, or some preparation of milk, as milk and lime-water (equal parts), whey with cream, or milk and water thickened with isinglass, or with Liebig's food for infants, in the proportion of one teaspoonful to four ounces of fluid. By using these different preparations a certain variety can be introduced into the diet, and the meals should be so regulated that the quantity taken on each occasion, and the length of the interval by which the meals are separated, may be properly proportioned to one another and to the state of the patient. The Liebig's food should be given not oftener than twice in the day; and if it excite flatulence, or if any sour smell be noticed from the breath or evacuations, the quantity should be diminished, or the food should be even discontinued altogether.

Beyond the age of six months a little weak beef or veal tea, or the yolk of one egg unboiled, may be added to the diet. The egg is best digested when beaten up, with a few drops of brandy and a tablespoonful of cinnamon water, as in ordinary egg flip. As with younger infants, the quantity of food to be given at one time must depend upon the strength of the child and the condition of his stools.

If the child be over twelve months old, very small quantities of farinaceous food may sometimes be ventured upon, and will often agree. The best form in which this can be given is well-baked wheaten flour, of which one teaspoonful is all that should be allowed at one time, prepared carefully with milk.

So long as milk is well borne the arrangement of the diet is comparatively an easy task; but in the not uncommon class of cases where milk is difficult of digestion, and can only be taken in very small quantities, a different dietary must be adopted. These cases usually occur in children of eighteen months or two years old. A good scale of diet for a child of a year and a half old, in whom this peculiarity is noticed, is the following, consisting of five small meals in the twenty-four hours:—

1st Meal. One teaspoonful of Liebig's food for infants (Mellin's) dissolved in four ounces of milk and barley-water (equal parts.)

2nd Meal. Six ounces of beef-tea, of the strength of a pound of fillet of beef to the pint.

3rd Meal. Six ounces of fresh whey containing a tablespoonful of cream.

4th Meal. The unboiled yolk of one egg, plain or

beaten up with a tablespoonful of cinnamon water, a little white sugar, and fifteen drops of brandy.

5th Meal. Same as the first.

In this dietary the first and the fifth meals contain a small quantity of milk. If that be found not to agree, the food may be dissolved in barley-water alone, or diluted with an equal quantity of veal broth, or veal broth alone may be given. In any case the quantities recommended should not be exceeded; for it is wise, at any rate at first, to be sparing rather than liberal in regulating the allowance of food. It is better that the child should be hungry than overloaded, and so long as the stools retain their pasty character it is evident that the food taken remains in great part undigested.

If the milk agree, it can be gradually increased in quantity; and as digestion improves, which it will do after a few days of this carefully regulated diet, other articles of food can be introduced, as roast mutton underdone, and well pounded in a mortar; the flower of cauliflower well boiled in water, or stewed with gravy until very tender. In the use of farinaceous foods great caution should for some time be exercised, and they should be given sparingly until convalescence is completely established, and the stools have reassumed a perfectly healthy character.

In these cases, and indeed in all cases where a special diet is recommended for children, a dietary as given above should be written out by the medical attendant. Not only the kind of food, but the quantity to be given for each meal, and even the hour at which the meal is to be taken, should be duly set down, so that no excuse may be available for neglect or misapprehension. It cannot be too often repeated that in cases such as these it is upon judicious arrangement of his food that the recovery of the child depends, and that where the diet is properly selected the exact medicine to be ordered becomes a matter of comparatively secondary importance. Even without the aid of drugs at all, the digestive powers would no doubt in many cases speedily right themselves under such a diet as has been sketched out above, but recovery is materially assisted by a judicious selection of remedies. It is well to commence the treatment by an aperient dose of rhubarb and soda, to clear away any indigestible food which may have remained in the bowels, after which the laxative should be followed up by a mixture containing an alkali with aromatics. It is difficult to over-estimate the value of alkaline remedies in the treatment of digestive derangements in children. In all children, infants especially, there is a constant tendency to acid fermentation of their food. This arises partly from the nature of their diet, into which milk and farinaceous matters enter so largely; partly from the peculiar activity of their mucous glands, which pour out an alkaline secretion in such quantities. An excess of farinaceous food will therefore soon begin to ferment, and an acid to be formed which stimulates the mucous membrane to further secretion. Alkalies are therefore useful, firstly, in neutralizing the acid products of his fermentation; and, secondly, in

checking the too abundant secretion from the mucous glands. Either potash or soda may be used; of the two the former is perhaps to be preferred, as being a constituent of milk, the natural diet of children, it may be considered less as a medicine than as a food. Five to ten grains of bicarbonate of potash may then be given, combined with an aromatic, several times in the day, and it is important that the dose should be taken an hour or an hour and a half after each meal, so that any excess of acid left at the end of digestion may be at once neutralised.

If the stools are loose and are passed frequently, two or three grains of the subnitrate of bismuth may be added to each dose of the mixture, and if much straining be noticed a drop of laudanum will be a useful addition to check the abnormal briskness of peristaltic action.

It is important that the aromatic be not omitted from the prescription. This class of remedies is of very great value in all those cases of abdominal derangement where flatulence, pain, and spasm, resulting from vitiated secretions and undigested food, are present to increase the discomfort of the patient. Such dyspeptic phenomena are usually rapidly relieved by the use of these agents; and the employment of aniseed, cinnamon, carraway-seed, or even of tincture of capsicum in minute doses, will be found of material advantage in combination with the other remedies which have been enumerated.

So long as the tongue remains furred, or the motions sour-smelling, the alkali should be persisted with, and the rhubarb and soda powder can be repeated every third morning. If it be thought desirable at the same time to administer iron, the citrate of iron and ammonia, in doses of five grains, can be added to the mixture. Tincture of *nux vomica* is also useful in one-drop doses.

The so-called alteratives are in these cases of little value, for it is no good attempting to stimulate the functions of the liver by cholagogues. Under the use of antacids and aromatics with an altered diet, food soon begins to be digested, and the appearance of the stools becomes more healthy. After a time, acid preparations, such as the penitrate of iron with dilute nitric acid, may be given with cod-liver oil.

A point which must not be overlooked in these cases is attention to the action of the skin. In all abdominal derangements in children the cutaneous secretion is apt to be suppressed early, and the skin soon becomes dry, rough, and harsh. When this is found to be the case, the child should be bathed every evening with hot water, and be then freely anointed with warm olive oil. By this means the suppleness of the skin is soon restored. Warm clothing should be worn, with flannel next to the skin; and as an additional precaution, to guard against the risk of chills, an ample flannel bandage should be applied as a protection to the belly.—*Practitioner*.

DISEASES OF THE EAR IN CHILDREN.

Dr. JULIUS BÖKE.—[*Jahrb. f. Kinderheilk.*, December, 1871.]—The author gives in this

article, the result of the treatment of eighty-four children for diseases of the ear. Diseases of this organ must be of great interest to all physicians engaged in the treatment of children, owing to the more injurious effects left behind than in cases of adults, the same pathological changes, which causes only deafness in the adult, preventing the child from learning to speak or to understand language, the development of the mind being checked, and many children having become deaf and dumb merely from neglect of diseases of the ear existing in earliest infancy. Pathological changes often cause such complications of symptoms as to render the diagnosis very difficult, sometimes impossible, without examination of the ear. It is not rare that loss of consciousness and high fever are caused by a collection of matter in the tympanum, the symptoms disappearing with its escape.

From the peculiarity of the anatomical structure of the ear in infancy, minutely described by the author, great care is necessary both in examination and treatment. Up to the end of the first year, great caution is required in the use of the syringe; in such cases, cleaning with pledgets of lint being preferable. Diseases of the external meatus in children up to seven years old are more frequently primary than secondary, after which age they are generally complicated with disease of the tympanum, and it is then difficult to decide which was first affected. It frequently happens that inflammatory symptoms make their appearance in the external ear passage simultaneously with the breaking through of a tooth. The treatment for external otorrhœa recommended is to wash out the external meatus with luke-warm water, or, if the secretion is very abundant, to use several pledgets of lint for cleaning the same. In many cases this suffices to cause the disappearance of the discharge in eight days. When this does not happen, the author uses a solution of plumbi acetatis, gr. ij., and aquæ. glycerinæ, aa ʒ ss., after each washing, five drops being dropped into the ear.

Foreign bodies in the ear rarely cause of themselves any particularly bad effects, such, when ensuing, being much more attributable to suppuration set up by too rough attempts for their removal. Removal should be attempted in the most gentle manner, and the best means is syringing with luke-warm water.

Inflammation proper of the middle ear, that is, where the discharge is purulent as distinguished from simple catarrh, was always ushered in by high fever, and sometimes severe cerebral symptoms preceded the appearance of the discharge. The treatment of suppurative otorrhœa in the middle ear, where of only few days' duration, consisted in syringing out the ear once to thrice daily, according to the amount of secretion; more frequent syringing or the use of astringents proved injurious. When suppuration had existed for any length of time, astringent solutions (zinci sulph., tinct. ferri muriatis, alum) were employed. Polypi were touched with argent. nit. The lapis, he employs

previously melted in a porcelain dish and, to the size of a hempseed, hardened upon the end of a probe; also, in such cases, blowing in powdered alum has proved useful. The average duration of treatment was six weeks, the perforation of the membrana tympani not always having cicatrized in this time, this sometimes not taking place for several months after the cessation of the discharge. Catarrh of the tympanum occurred always in connection with tonsillitis or nasal catarrh, and disappeared simultaneously with the cure of these.

BORAX AND THE NITRATE OF POTASSA IN THE LOSS OF VOICE FROM "COLDS" IN PUBLIC SPEAKERS AND SINGERS.—Dr. J. W. Corson (*Med. Record*, January 1, 1873) states that by the use of these two remedies he has had the pleasure, within the last few years, of restoring to a number of clergymen and lecturers the lost gift of speech within twenty-four hours. The paper contains a statement of several cases. He sums up the results of his experience in the following conclusions:

"1. That in sudden hoarseness or loss of voice in public speakers or singers, from 'colds,' relief for an hour or so, as by magic, may be often obtained by slowly dissolving and partially swallowing a lump of borax the size of a garden-pea, or about three or four grains, held in the mouth for ten minutes before speaking or singing. This produces a profuse secretion of saliva, or 'watering' of the mouth and throat. It probably restores the voice or tone to the dried vocal cords, just as 'wetting' brings back the missing notes to a flute when it is too dry.

"2. Such 'colds' may be frequently 'broken up' at the very commencement, and this restorative action of the borax to the voice may be materially aided by promptly taking, the evening previous to a public effort, dissolved in a glass of sweetened water, a piece of the nitrate of potassa, or 'saltpetre,' a little larger than a garden-pea, or about five grains, on going to bed, and covering with an extra blanket. The patient should keep warm next day. This both moistens the dry throat and further relieves the symptoms of 'cold' and slight blood-poisoning from suppressed perspiration, by re-opening the millions of pores of the skin more or less closed by cold.

"3. These remedies have the three recommendations of being easy to obtain, convenient to carry in travelling, and perfectly harmless.

"4. They are nearly or quite useless in the actual cure of any long-continued chronic disease of the throat, or acute inflammation or 'tonsillitis,' both of which require other appropriate treatment."

COLDS—STOP THEM.—Dr. Dobell, in his recent work on winter cough, says, in emphatic italics, "*colds can be stopped without lying in bed, staying at home, or in any way interfering with business.*" He says that his plan, if "begun directly the first signs of catarrh show themselves in the nose, eyes, throat or chest, . . . is almost infallible," but "will not answer if the cold has become thoroughly established."

"The plan is as follows:—

"1. Give five grains of sesquicarbonate of ammonia, and five minims of liquor morphine in an ounce of almond emulsion every three hours. 2. At night, give 3 iss. of liquor ammoniæ acetatis in a tumbler of cold water, after the patient has got into bed and been covered up with several extra blankets; cold water to be drunk freely during the night should the patient be thirsty. 3. In the morning, the extra blankets should be removed so as to allow the skin to cool down before getting up. 4. Let him get up as usual, and take his usual diet, but continue the ammonia and morphia mixture every four hours. 5. At bed-time, the second night, give a colocynth pill. No more than twelve doses of the mixture from first to last need be taken, as a rule; but should the catarrh seem disposed to come back after leaving off the medicine for a day, another six doses may be taken and another pill. During the treatment the patient should live a little better than usual, and on leaving it off should take an extra glass of wine for a day or two.

Dr. Dobell says his patients call this the "magic mixture."

UNEQUAL DILATATION OF THE PUPILS AN AID IN DIAGNOSIS.—(*Arch. de Physiol.*, Jan.-Feb., 1872).—Dr. F. Rogue, after a series of prolonged observations made upon children, has come to the following conclusions with regard to the unequal dilatation of the pupils in unilateral affections of different organs;—

1. In many affections of the lungs, and also in case of swelling of the bronchial glands, as well as of the glands of the pericardium, the pupils are unequally distended.

2. The enlarged pupil corresponds to the affected side.

a. When both sides of the body are effected, the more widely dilated pupil corresponds to that side upon which the inflammatory process is the more recent.

b. In cases of inflammation of both lungs as well as that of the bronchial glands, the more widely dilated pupil corresponds to the side of the affected glands.

c. If an affection of the right lung is complicated with pericarditis, the right pupil is the more widely dilated.

This phenomenon is explained by one of the more recent discoveries of Claude Bernard, viz., that the irritation of certain nerves of sensation conveys a shock through the spinal cord to the radial muscular fibres of the iris, causing the contraction of these fibres and the consequent dilatation of the pupil. It may not be unreasonably inferred that analogous changes of the pupil accompany other unilateral affections in different portions of the body.

ON CROUP.

By Dr. ROBERT C. R. JORDAN, Assistant Physician to the Children's Hospital, and Prof. of Diseases of Children at Queen's College Birmingham.

In all my own early teaching it was so strongly

impressed upon me that "croup" was always a membranous exudation in the larynx or trachea, that it became to my mind a great difficulty to throw off the trammels of this old belief, and it was long before I could feel fully persuaded of what I now know to be the truth—namely, that the majority of the cases usually called by this name have no false membrane formed at all, but that their essential nature is an inflammation of the mucous membrane of the larynx and trachea, accompanied with secretion of tenacious mucus, and also considerable swelling caused by effusion into the submucous areolar tissue. They are, in fact, catarrhal inflammation of the larynx and trachea. All other cases where exudation is really present are diphtheria; and it is in this sense, and with this definition only that we can regard croup and diphtheria as two distinct diseases. To make my meaning clear let me follow out the course of the two, and lay before you in general terms the broad distinctions between them, beginning with the disease which in my younger years was most familiar to me, because during times of cold or east wind it occurs sporadically in country practice all over the kingdom, and to which I was taught to give the name of croup. The early symptoms are very similar to those of an approaching attack of measles, save that there is no superabundant secretion from the lachrymal glands, and consequently no running from the eyes and nose, but there is fever and dry barking cough of that peculiar character which of necessity occurs when the rima glottidis is narrowed. This cough is indeed the crucial symptom, and yet it has probably existed for two or three days before its nature has been marked enough to alarm the mother. On questioning her you are likely enough to find that the child "has had a cold for a few days, but that she has thought nothing of it." To trained ears, however, the peculiar cough is very manifest almost from the commencement, and if the child be asked to draw a deep breath the stridulous sound completes the diagnosis. The cough and the inspiration are both pathognomonic of croup, but of croup in its abstract sense only; they tell you that there is narrowing of the passage which allows the entrance and exit of air to the lungs—that is, of larynx or trachea. The history of the case supplies the other evidence. It is acute, and this eliminates all the chronic forms of laryngeal disease to which children are prone, such as, for example, warty or other growths. A careful examination shows no exudation on the throat or fauces, and the history is not that of soar throat, but of cough; this makes diphtheria at least improbable. The symptoms have been those which would naturally take place in an attack of bronchitis and tracheitis, with a tendency to spread still further upwards and involve the larynx in the mischief; and it is the swelling of its mucous membrane, and the consequent narrowing of the chink at the outlet of the larynx, and the swelling of the lining of the vocal cords, that gives the more decided "croupy" character to the cough, to the inspiration, and to the voice, this last being often almost absent. It is

these also that give the danger to the attack; the same amount of congestion, the same amount of effusion into the sub-mucous areolar tissue elsewhere would be of no serious import. Hence the mother until closely questioned dates the attack from the commencement of the danger, and says that it came on "quite suddenly;" and in truth, when laryngeal symptoms do begin, they increase very rapidly, and every hour makes the danger greater—almost every breath is more and more difficult, respiration becomes more and more diaphragmatic, the sternum is drawn in with every breath, and in spite of the increased labour less and less air passes through the laryngeal opening; the lips and face became more purple, the lungs become congested, this further increases the dyspnoea, and the child dies suffocated. Such is the natural unchecked end of the disease—a termination which it is difficult to avoid in the cottages of the poor, where, from the very nature of the case, the child cannot get proper treatment, where there is no skilled nurse to follow out the doctor's advice, and where the temperature of the room varies with every opening door. Now, what are the post-mortem appearances? There is no false membrane in either larynx or trachea, but simply a swollen and congested state of their mucous membrane, which is generally spread over with a tenacious mucus nearly as viscid as pneumonic sputa. These changes extend more or less into the bronchi, and with a congested condition of the lungs, are the only signs visible to account for death. I have many carefully noted records of such post-mortem appearances written in old days, when the influence of what Bacon would call the "idol of the theatre," was so strong upon me that it is always stated, "false membrane in a perfectly diffuent state spread over the mucous surface." Now, this "diffuent false membrane" is, in reality, only a synonym for tenacious mucus. This is the disease which occurs sporadically in town and country alike, and which is commonly called "croup." The cause is generally exposure to cold, though some children are more predisposed to it than others—and I have known many who have had several well, marked attacks, which for the most part decrease in violence as the child becomes older. It is also a decided fact that there is a clear predisposition to it in some families, though when a child is said to be "subject to croup" it is laryngismus that is most often meant. The essence of this disease is therefore laryngitis and tracheitis of a catarrhal character, and the danger is because the entrance and exit of air to and from the lungs is impeded; the object of treatment is therefore to make a decided and quick impression on the disease. Time does not admit of the least delay. You must at once place your patient in the best possible state for recovery—that is, let him be in a warm room with no drafts, and a uniform temperature of at least 70° Fahr., and let the air which he breaths be thoroughly saturated with moisture; a boiling kettle pouring out its steam into the room often manages this very efficiently. The plan which is adopted in the Children's Hospital here, is to boil a large iron kettle, to the spout of which is affixed a long tube

ending in a rose like a watering pot, from which the steam pours out copiously; but as this cannot always be at hand your ingenuity must be taxed to find a substitute—but remember that the soft moist vapour acting locally on the swollen mucous surface is as important an agent in the treatment as any other therapeutic means. A linseed poultice to the throat helps also in this, and has certainly a soothing power. These external appliances being completed, then give at once an emetic of ipecacuanha, and repeat this every twenty minutes or half hour, until not only copious vomiting but copious perspiration is induced. As a result of this the secretion of the air passages also becomes thinner and more easily got rid of, and it will be borne in mind that the cough becoming looser is an excellent symptom. Increased mucous rale, without the power of cough, has of course a different meaning, but a looser cough always bespeaks a lessened danger. In addition to the ipecacuanha, a very good prescription is a powder with calomel gr. $\frac{1}{4}$, compound ipecacuanha powder gr. $\frac{1}{4}$, and chlorate of potash gr. iij., every half hour or hour according to the severity of the symptoms. Of course the dose must be modified slightly according to the age of the patient. If the disease does not abate, next comes the question of tracheotomy; and in this case I would leave it as long as can be done consistently with safety. So frequent is the recovery, even when the case is seemingly hopeless, that tracheotomy may be fairly called a last resort. These attacks of laryngeal catarrh can fortunately be pointed out as marked examples of the efficacy of medicine in acute disease. They are amongst the few cases where the effects of remedies can be seen, and where we can say that, if left to nature, the tendency is rather to death than to recovery. It is not meant to undervalue tracheotomy in these cases: no patient should be allowed to die without the chance which it affords. Yet so marked are the effects of curative agents, that time should always be allowed for a full and decided trial of their power before resorting to the operation.

The following case illustrates this catarrhal croup forcibly:—Early in the morning of August 14th, 1869, I was called to Arthur B., a little boy aged two years eleven months. I found him breathing a hundred times in the minute, the croupal sound very loud, the distress and agitation very great; the pulse could not be counted, the face was commencing to be dusky, the skin was hot, dry, and burning. The operation of tracheotomy was proposed, but it was decided to try other means first. The room was therefore made warm with the steam of boiling water, the throat painted with liquor epispasticus, and a linseed poultice applied over it. A teaspoonful of ipecacuanha wine was ordered to be taken every twenty minutes, and half a grain of calomel every hour. A little before midday a slight improvement was noted, although there had been very frequent sickness, yet the pulse was stronger, the distress less, and the labour of breathing also lessened; but by the early evening the improvement was much more decided—the respirations were reduced to twenty-five, and though a loud croupal sound was audible

with every respiration, yet there were moist râles also heard, and the skin was warm, damp, and freely perspiring. The pulse was only 90, and from this time the process of recovery went on steadily. It is seldom that a case presents such a decided improvement as this in so brief a time, yet the period of extreme danger is always short. To the treatment used, I would now make one exception, viz., the blister. Had tracheotomy been necessary, as indeed at first seemed most probable, the blister would have complicated the operation, and rendered its after treatment more difficult. The linseed poultice alone seems to me, therefore, a safer remedy.

Now let us turn to the other form of disease. Where a false membrane is really present the whole category of symptoms is very different from those last described. This illness is not dangerous only from its position; it is not a mere catarrhal state of a mucous membrane, but it is a disease in itself, and the production of the false membrane is merely a phase in it. The patient, if he be old enough to complain at all, speaks of feeling ill, and of some soreness about the throat; but although there has been premonitory fever, there has not been, as in the last disease, premonitory cough. It is not, however, impossible that the croupal breathing, or croupal cough (for cough is then present) may be the first stage in the disease for which the mother requests the advice of her doctor, but the history will show that these have not been the first symptoms. On examining the throat, the uvula or tonsils are generally found more or less coated with the well known diphtheritic membrane which has caused the "croup" by extending into the larynx. The history of this case shows that the child has been depressed and feverish for a time varying from a few hours to as many days, and that this has been followed at first by symptoms of sore throat rather than of cough. The last was a chest disease, proceeding upwards to the larynx; this is, as far as its external signs show a throat disease passing downwards, and the difference in symptoms is to be looked for accordingly. All know that an elongated uvula does give cough; that a swollen epiglottis does the same; that the swelling of larynx would equally produce it, and that even before the invasion of a diphtheritic membrane; so that there may be a certain kind of cough history; but that has not been the special symptom—not, as in the case of laryngitis before mentioned, the only symptom in a child otherwise well. Sometimes, however, the little patient is not seen until urgent laryngeal symptoms are well set in, and then, if there be no history, and also, from the urgency of suffocation, much difficulty in examining the throat, the diagnosis is one of real difficulty; but it is not then of vital importance, since in such a case the immediate performance of tracheotomy is certainly necessary. It is my decided opinion that sometimes cases of diphtheria occur in which no false membrane is visible from the mouth; yet it must be confessed that I have never made any notes with a view to the investigation of this special point, and there is some difficulty in getting a thorough look at the throat of a living child when suffering from

laryngeal dyspnoea. Moreover, post-mortem examinations are apt to slur over the mouth, uvula, tonsils and pharynx; yet I have notes of several cases where no throat diphtherite is mentioned, and where my firm impression is that none was present; and there certainly is no known reason why such should always be the case. There would, of course, be rather more difficulty in distinguishing these from catarrhal croup, yet this is in most cases rather an imaginary than a real difficulty. Albuminuria is a frequent symptom in diphtheria, but by no means constant enough to form a ground for diagnosis. If present in a doubtful case it might certainly clear it up; but, on the contrary, its absence would prove nothing. It is therefore, the early symptoms, and the presence or absence of exudation in the throat, on which we mainly rely. If the child has had shivering and fever with sore throat before the laryngeal symptoms began, if there is a history of general malais before the croup commenced, we have a right to expect the presence of exudation, and when present it will most frequently be easily seen.

The next question which arises is, Do the two diseases require any difference in treatment so as to make a clear diagnosis of importance? Such is most decidedly the case. Catarrhal laryngitis is dangerous only from its position, and we have to subdue it by prompt and active measures; but in diphtheria we have a depressing blood-poison, dangerous in itself, quite independently of its position, and our lowering treatment is useless, or worse—positively injurious. Emetics are even to my mind doubtful. Cases are on record, certainly, where tubes of false membrane have been said to be brought up by their action, yet these must have been in a very different state from that in which we generally see them, as they do not usually adhere so loosely as to be got rid of in this manner, and we have no right to expect any such result. Still, one or two full emetics may be tried; but, these failing, do not steam the child as in laryngitis. Do not add to the depression by mercury, but give him some supporting mixture, such as the tinctura ferri muriatis with liquor ammoniæ acetatis; and if laryngeal symptoms have set in and there is real dyspnoea, if the breathing be laboured and the sternum drawn in with every breath, do not wait for symptoms of impending suffocation, but operate at once—the earlier the better. The false membrane in the larynx will probably spread further downwards; moreover, the blood poisoning continues, and to wait for blue lips means to wait for pneumonia also. When the larynx or trachea is thoroughly invaded you cannot operate too early: delay means death. It must be remembered that the operation does not check the disease; but as we have no specific treatment that can stop it, perhaps simple support after the immediate risk of suffocation is over is as good as any other.—*Medical Times and Gazette*.

A NEW METHOD OF TREATING HYDROCELE.

By S. MESSENGER BRADLEY, Esq., Manchester.

While the various plans of treating hydrocele

hitherto recorded possess the prestige of a high antiquity, they all alike suffer from being occasionally unsuccessful, or even hurtful, in their results. These objections hold good, though in a less degree, in speaking of the treatment by tapping and injecting the vaginal sac, which has practically superseded all other modes. This operation, first recommended by Celsus, who advised nitre as the best injection, fell into a long desuetude after his death, until revived by Munro the elder, and of late years popularised by Sir Ranald Martin, whose claim to originality lies in his choice of iodine as the most suitable stimulating agent. Other plans are, however, resorted to from time to time, either from their greater safety and simplicity, or from the occasional failure of the iodine treatment. Thus, briefly to summarise these methods, we have—1, *treatment by acupuncture* recommended by Lewis, and still sometimes adopted and found to succeed in cases of congenital hydrocele; 2, the mere *application of an evaporating lotion*, such as muriate of ammonia, vinegar and water, which, it is probable, has only been found of service by Keate, who, I believe, was the first to recommend it to the profession; 3, *simple tapping*, nearly always failing to effect a cure, and not always without danger, inasmuch as it is sometimes followed by a hæmatocele, or even sloughing of the scrotum; 4, *laying open the sac*, a plan approved by the fathers of medicine, but abandoned by their descendants of the present day; 5, *excision of a portion of the tunica vaginalis*, which has, in having been practised by Albucasis, an almost equal antiquity with the one last mentioned, and has met with quite an equal neglect; 6, the plan of *evacuating the fluid and introducing some caustic on the end of a probe*, of which Paulus Ægineta writes in warm praise, and which, though occasionally adopted, as Humphry states, at the present day, is not likely, either from its success or safety, to become more general than it deserves; 7, *the introduction of a tent into an open wound*, as performed and praised by Paré, Baron Larrey, and others; and 8, the somewhat similar plan, still, I believe, commonly practised by the Arabians, who were the first to adopt it, of *passing a seton through the vaginal sac, and there retaining it for twenty-four hours*. It is likely enough that this operation would succeed in cases which resist all milder treatment, but, from the by no means trifling danger attending it, it should not be resorted to if we can equally achieve our object by a safer mode of procedure; and this, I believe, can be done, as I will endeavour to show.

It very frequently happens that a hydrocele must be treated, if treated at all, in the out-patient department of an hospital or at the surgeon's residence; that is to say, at a distance from the patient's own home. Now the disadvantages arising from this fact are, that the walk home after operation is apt to induce considerable and even dangerous inflammation, or that a hæmatocele ensues as the result, not necessarily of wounding the testicle, but of a dribbling from the scrotal veins, which are turgid from their dependent position.

Pondering these circumstances, and also reflecting

upon the fact that the walls of pyogenic membranes, such as those of abscesses, sinuses, and the like, will often agglutinate when brought into warm and continued apposition; and remembering at the same time, that the serous tunic of the testicle is from its physiological nature liable to take on adhesive action, and that, from the character of the secretion poured out in a hydrocele being inflammatory and not dropsical, it would be even prone to do so, I was led to the inference that simple tapping, followed by firm and equal strapping of the affected side, would probably be followed by an obliteration of the vaginal sac and a consequent radical cure.

It was not long before I was enabled to test the accuracy of this reasoning. A medical man applied to me with a large simple hydrocele, which had been tapped several times, and the last time injected with iodine without success. After explaining my object to him, I tapped the hydrocele, drawing off half a pint of fluid, and tightly strapped the affected testicle with soap plaster. This was done at my own house, and the patient walked home, a distance of about a mile, immediately afterwards, and continued to go about during the process of recovery, which probably took place in about ten days; I say probably, as I kept up the pressure for three weeks without allowing the testical at any time to remain unsupported. This case occurred eight months ago; since then I have followed the same course in three other instances, and in each with an equally satisfactory result. In no case was there any fresh effusion of fluid. Another case which came under my notice was of some interest in illustrating the advantages of strapping in what would beforehand appear quite unfavorable circumstances. A man came to consult me about a recent hydrocele of some magnitude; I tapped and emptied the tumour, but did not strap it at the time, as there was a strong force of pediculi encamped in the pubic and scrotal hair; ten days afterwards he visited me again, having got rid of his unwelcome guests, but with his tunica vaginalis as much distended as ever. I again tapped him; but, though I do not think I wounded the testicle, which could be plainly enough seen at the back of the tumour, I did not succeed in drawing off any fluid worth speaking of; nothing followed, indeed, but a few drops of bloody serum. In three days he came again with his scrotum larger than ever. The tumour had now, however, changed its character; it was now no longer transparent and pear-shaped, but opaque and rounded; it had also become very heavy, and much more painful than it had ever been before. In other words, a hæmatocele had formed. Without the anticipation of much good resulting, I resolved to try the affect of strapping in this case; suffice it to say that this proved effectual, not only in causing the absorption and dispersion of the vascular extravasation, but also in permanently curing the hydrocele. In spite, however, of the success in this instance, I am not inclined to think that the plan would prove generally efficacious, in the treatment of even recent hæmatocele, and I do not now at all desire to advocate it in such cases.

In regard, however, to hydrocele, it appears to me

that we have in this plan of tapping and strapping one which satisfactorily fulfils the idea of curing safely, quickly and pleasantly, and which, though perhaps not about to prove infallible, is one which should be certainly tried in all cases (especially, I would add, those treated away from the patient's home), before the injection of iodine or other stimulant is resorted to. If cases occur in which neither the mode I here advocate nor the iodine treatment is successful, I am of opinion that a combination of the two would be likely to prove so.—*British Medical Journal*.

THE USE OF PANCREATIC EMULSION IN THE WASTING DISEASES OF CHILDREN.

BY DR. DOBELL, Senior Physician to the Royal Hospital for Diseases of the Chest.

[In 1871 Dr. Dobell intended to prepare an article for publication "On the Use of Pancreatic Emulsion in *Tabes Mesenterica*." He, however, gave up the idea on account of the difficulty of proving in the cases which recovered that the mesenteric glands had been the seat of disease.]

In this paper I propose to drop the question of disease of the mesenteric glands, and simply to speak of the class of cases constituting that wretched form of "atrophy and debility" and "marasmus" in children, in which every part of the body wastes away except the abdomen; the state described by Dr. Druitt, in the last edition of his *Vade Mecum*, in the following few and graphic words:—"Emaciation and voracity; the belly swelled and hard; the skin dry and harsh; the eyes red; the tongue strawberry coloured; the breath foul; the stools clay-coloured and offensive, sometimes costive, sometimes extremely relaxed; the patient usually dies hectic." I wish to bring prominently forward the fact that this state, provided there is no advanced lung disease, is rapidly cured by pancreatic emulsion given in doses of a teaspoonful every four hours, and regularly persisted in till fat and flesh are restored. It is, of course, necessary that a proper diet should be insisted on at the same time; but proper diet without the pancreatic emulsion will not do. This I have found over and over again in cases where everything judicious in the way of feeding and cod-oil had been carefully and perseveringly tried without avail, but which, on the addition of the emulsion to the previous diet, began at once to improve.

This fact has been familiar to me for a long time; and considering how largely pancreatic emulsion is now used in the wasting diseases of adults, I am surprised to find that it is not even referred to in the latest works on the diseases of children. Looking through these works and examining their indexes, one is led to the conclusion that their authors are not aware that there is such an organ as the pancreas, or that pancreatic juice has ever been used in any form in the treatment of disease. Yet scarcely a week now passes but some general practitioner relates to me cases of the successful use in his own practice of pancreatic emulsion in the wasting of delicate children; showing that in this respect the rank and

file of our professional army are in advance of some of their generals, which ought not to be the case.

Dr. Prospero Sonsino's paper will, I hope, excite more general attention to this important subject. He, however, has laid all the stress of his observations upon the influence of the salivary and pancreatic juices on the digestion of starch. This is unquestionably a point of the greatest importance in the case of very young children brought up by hand, as showing the absurdity of attempting to nourish them upon starchy food, not artificially digested, before the period of life at which the saliva and pancreatic juice attain their functional activity. And even then, as Dr. Sonsino afterwards remarks, "good reasons make us now believe that really it is not proper to feed infants with copious starchy matters, however these may be rendered digestible." The principal results of Dr. Sonsino's investigations are summed up in the two following conclusions, which, however, are not new:—1. "Pancreatic juice in dogs, cats, and rabbits, in the first week of life—perhaps for some days more—is devoid of any digestive action on starch." 2. "In the early life of man, probably till the beginning of dentition, infants offer a true physiological dyspepsia for starchy aliments, caused by the inactivity of one at least—possibly of all—the humours that concur in the digestion of those aliments" (saliva, gastric juice, pancreatic juice, enteric juice.)

No doubt, when wasting occurs in these early periods of life, it is very often due to foolish attempts to nourish children upon farinaceous foods, by which dyspepsia and diarrhoea add to the exhaustion of partial assimilative starvation. But, as a matter of fact, farinaceous food is seldom depended upon without some addition of cow's milk or some assistance from lactation; and we see children suffer from wasting who are fed entirely upon cow's milk or nursed by their mothers, and in such cases the "physiological dyspepsia for starchy food" will not account for their decline. Therefore we must not forget, that although normal saliva only acts upon starch, normal pancreatic juice acts also upon fats; and it is probable that these two functions of the pancreas are sufficiently independent of each other that they may exist separately. This I pointed out in my paper to the Royal Society in 1868, "On the Special Action of the Pancreas on Fat and Starch" (*Proc. Royal Soc. No. 97*). It is there stated as the results of my experiments, that "in addition to the influence of the pancreas upon fat, it has the power of converting starch into glucose by simple mixture. This property remains to a certain extent after the pancreas has exhausted its property of acting upon fat. The quantity of pancreas which before mixture with fat will convert about eight parts of starch into glucose, after saturation with fat will still convert about two parts of starch into glucose." It is possible, therefore, that in different states of depraved health one or other of these properties of the pancreatic juice—that for the digestion of starch or that for the digestion of fat—may be deficient. And thus the depraved nutrition due to such deficiency will not be limited to the

period of life anterior to that at which, under normal conditions, the proper functions of the pancreas should be developed. It is evident that when the power of digesting fat fails to be developed at its proper time, the defect must tell with double force upon children already suffering from deficient digestion of starch.

The children who become the subjects of this kind of wasting of which I am now treating are especially (1) those who are sucked by mothers whose milk, though abundant in quantity, is extremely deficient in nutritive properties; (2) those who are brought up by hand; and (3) those who at a later period of childhood, have been subjected to similar chronic defects in diet. Now, it is especially when the mother's milk is poor in fat and lactin that the child becomes "dissatisfied," and "craving," and in the majority of cases it is this which first leads to the introduction of farinaceous food, under the popular nursery belief that it is "*satisfying*;" and, as Dr. Sorsino states, if this is given before the power of digesting starch is established, of course nothing but mischief can result.

But organs, like individuals, do not rise to the full performance of their duties unless called upon by the necessity for their activity; and, as I pointed out in 1866 (*On Tuberculosis*, p. 40, second edition) "As the mother is deprived of fat elements by lactation, so is the child deprived of them by a persistence in a diet deficient in milk. In the case of the child thus deprived of fat, a double injury is done—first by cutting off the supply of fat elements necessary for the protection of the tissues; and secondly, *by paralysing the function of the pancreas by prolonged inactivity.*" I venture to think that this is a point deserving of far more attention than it has yet received. It accounts in a great measure for the impossibility of restoring these ill-nourished wasted children by any kind of *natural* diet after they have been allowed to remain in a chronic state of defective nutrition. A child that has been long fed upon diet deficient in fat fails to develop the fat-digesting properties of the pancreatic secretion, and thus, when proper food is at last presented, cannot make use of it for nutrition.

It is probable, therefore, that it is due to this conjunction of circumstances that these wretched cases of fatal infantile wasting occur;—the food deficient in fat not only fails to nourish the child, but fails to develop the function of the pancreas for the digestion of fat at a later period of life; the craving of the child due to the deficiency of assimilated fat is met by starchy food which it has not the power to digest, and which if digested cannot supply the place of fat. Thus it is literally starved from first to last of those elements of nutrition especially essential in early life. We cannot, therefore, be surprised that such cases have proved obstinately fatal, neither is it anything but what one might expect, *à priori*, that they get rapidly well when pancreatic emulsion of fat is added to their diet, for by this means they are enabled to assimilate both fat and starch.

I have proved over and over again that, whether

in children or adults, no amount of milk or cream, however good, will do instead of pancreatic emulsion; and I have tried to discover why this should be. Milk, so far as this part of its composition is concerned, is simply an emulsion of fat; and pancreatic emulsion, as I have shown in the paper to the Royal Society already referred to, is not, as formerly supposed, a chemical combination, but a true emulsion. Why, then, does not milk answer as well? I believe the explanation to be very simple, and that it turns upon the following points:—

1. The fineness of the particles of fat.
2. The permanent character of the molecular mixture of fat and water.
3. The proportion of fats having high melting points.

(a) In my first paper on Pancreatic Emulsion, *Lancet*, (September 10, 1864). I gave the measurements (made by the late Mr. Farrants, president of the Microscopical Society) of the particles of fat in cod-oil and beef-fat emulsions, as then prepared for me; showing that the majority of the particles in the cod-oil emulsion ranged from the 16,000th to the 1,200th of an inch in diameter, and those in the beef-fat emulsion from the 10,000th to the 2,500th of an inch; and, according to Bowman (*Practical Handbook of Medical Chemistry*, p. 174), "The size of the globules in healthy milk varies from a mere point to about the 2,000th of an inch."

Since I published Mr. Farrants' measurements, pancreatic emulsion has been made by a much more equal and satisfactory process than at that time, and I have just examined a chance specimen procured from Messrs. Savory and Moore, in which the large majority of the particles of fat range from the 21,600th to 14,400th of an inch in diameter, the prevailing size being the 18,000th of an inch; while in a specimen of good new milk (cold), which I have also just examined, the large majority of the particles of fat range from the 7,200th to the 3,600th of an inch in diameter, the smallest being the 10,800th.

(b) The permanent character of the pancreatic emulsion is very remarkable, far exceeding that of milk. It "differs entirely from all other kinds of emulsion of fatty matter, whether chemical or mechanical. All other emulsions of fat are destroyed by ether, the fat being restored at once to its original condition. The influence exerted by the pancreas upon fats, therefore, appears to operate by breaking up the aggregation of the crystals of the fat. It alters the molecular condition of the fat, mingling it with water in such a way that even ether cannot separate the fat from the water. A *permanent emulsion* is thus formed ready to mix with a larger quantity of water whenever it may be added." Proceedings of the Royal Society, already referred to.

(c) In the *Chemical News*, September 4, 1868, I have stated my reasons for believing in the importance of fats of high melting points, such as stearine, margarine, and palmitine, over those of low melting points, such as olein, as elements of food and medicine; although further experiments and investigations are still needed on this interesting subject.

Pancreatic emulsion of solid fat, consisting principally of stearine, margarine, and palmatine, is therefore quite a different thing from milk, the fat of which is principally olein.

Now, the nearest approach to a pancreatic emulsion is what may be called *nuscent milk*, by which I mean milk just secreted—milk that flows from the mammary gland as it is formed, or, as mothers term it, “as the draught comes in.” In this the emulsification is finest and most perfect, but every minute that elapses after the milk is secreted deteriorates this perfection of emulsification, until, as we know, whether retained in the lactiferous ducts or in an artificial vessel, but especially in the latter, and when allowed to cool, the cream separates from the water of the milk, never again to be susceptible of the same emulsification with water in which it first existed, *except under the influence of pancreatic juice*.

I submit that this is the secret of the superiority of lactation, and especially of lactation at the time “the draught comes in,” over every other kind of infant feeding, whether in man or in the lower animals. It forms an important distinction between milk diet supplied by the natural process of suckling and milk diet administered artificially, and affords some reasonable colour to the old standing belief in the efficacy of “new milk, warm from the cow” for delicate children, and to the remarkable recoveries recorded to in ancient times of old persons nourished by lactation when everything else had failed.

The Author will be much obliged to any of his readers who will favour him with their clinical experience on the subject of this paper.—*Practitioner*, Oct., 1872.

ON THE TREATMENT OF SCARLATINA.

By W. C. WILLIAMSON, Esq., F.R.S., Professor of Natural History in Owen's College, Manchester.

About the period when my attention was first directed specially to this subject, the treatment of scarlatina by ammonia was attracting notice. The success which was said to have attended the adoption of this plan suggested to my mind the possibility of preventing the lowering of the vital energies by the free and bold administration of stimulants from the very commencement of the attack, instead of waiting until symptoms of depression began to manifest themselves; and believing that it was the stimulating properties of the remedy, and not any imaginary power it possessed in rendering the blood more fluid, that made ammonia useful, I determined to try the effects of champagne, which I did in the next case of scarlatina that fell into my hand, which was at the commencement of 1859; the result was most satisfactory. Since that time I have attended a very large number of such cases, yet I have rarely given a dose of medicine of any kind during the last ten years. The moment I became satisfied that the case was one of scarlatina, I have administered the champagne regularly and freely. The more severe the febrile symptoms, being convinced that they resulted

from an atonic rather than an opposite state, the more bold has been my administration of the stimulant, and these symptoms have always diminished in violence instead of being increased by the treatment. The rash has come out more freely; I have not had one solitary example of diseases of the ear, or of malignant sore throat; but one of unconsciousness, with a typhoid condition; and also but one solitary instance of nephritic dropsy. The last case only confirmed my views. The young child of a professional man was seized with the fever, but the attack was very much masked in its early stage. Three days elapsed before I could satisfy myself that the case was really one of scarlatina; and I believe that the loss of these three days, during which champagne was not administered, had much to do with a *slight* attack of dropsy with albuminuria, which followed in about three weeks. Of course I do not believe in universal remedies of any kind, but I am convinced that in the disease under consideration, the true plan of treatment is to save the patients from the stage of depression instead of trusting to our power of lifting them out of it at a later period. One of the latest cases which I attended illustrated the possibility of doing this in a remarkable manner. A fine boy, seven years of age, was attacked very smartly in March, 1869. Within forty-eight hours after I first saw him his lips had become dry and brown, his tongue being the same. Sordes gathered about his teeth, and his throat was rapidly assuming an alarming condition, both as regards its appearance and his inability to swallow; but during that interval the child had taken two full-sized bottles of the best champagne, and in the forty-eight subsequent hours he drank two more. The result was that all the typhoid symptoms disappeared as rapidly as they arose, and in the evening of the fourth day the child was sitting up in bed merrily rejoicing over a basinful of boiled milk. I have not the slightest doubt that any delay in the administration of the stimulant would, in this case, have been fatal. The suddenness with which the formidable symptoms sprang up, and the rapidity with which they progressed during the first two days, were most significant of a serious result. They passed away again more rapidly than they arose.

Two points alone have I found requiring to be watched in connection with this plan. These are the possibility of sickness and of diarrhoea. Occasionally I have found it necessary to suspend the champagne for a few hours, falling back during the interval upon old port wine, but such cases have been rare. The fact that a young child of seven or eight years of age can take an entire bottle of champagne within twenty-four hours, not only without intoxication but without any signs of excitement, is, in itself, significant of the atonic condition of the nervous system and of the necessity for upholding it *from the beginning*.

In addition to this plan of treatment I believe it difficult to exaggerate the importance of caution in the after treatment. After the first week I gradually diminish the stimulant, but rigorously enforce confinement to bed during the first three weeks, and

to one room for three more. During the present spring I have seen the first case of a death occurring in spite of this treatment. It was that of a boy who had been delicate from infancy, and in whom some low muttering delirium set in on the second day; yet even here the power of the stimulant was exhibited. Early in the morning of the fourth day I was summoned to him, and found him apparently dying. For some hours previously the nurse had very improperly relaxed the administration of champagne; I immediately resumed it, and the constant rally was most remarkable, again giving me hopes of a favorable result, but the boy sank early on the seventh day.—*Manchester Medical and Surgical Reports*, p. 61.

THE CANADA MEDICAL RECORD

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MONTREAL, APRIL, 1873.

TO OUR SUBSCRIBERS.

We have to return thanks to a very great many of our Subscribers for the prompt reply they made to the Bills enclosed in the February number of the Record. There are, however, some who have not done so, and we believe we have only to remind them of the fact, to cause them, without more delay, to remit to us the small sum of two dollars, the subscription of the Record for the year.

WORDS OF ENCOURAGEMENT.

The work of conducting even a monthly Medical Journal is a much more laborious task than at first sight would be supposed. This is especially the case with ourselves, where, in addition to the editorial duties, we act as proprietor, bookkeeper, and dispatcher. In other words, where every duty pertaining to the publication of the Record is performed by the Editor. Unfortunately pecuniary recompense, at all events to any adequate degree, is beyond expectation, for a time at least, and for our reward, we have to look to our patrons for kind words of sympathy, and a recognition of the value of the Record to the practitioner, engaged in busy general practice. We have tried to make the Record, as far as is possible, a thoroughly practical periodical, one that would be anxiously looked for each month, and we are proud to say that, so far as one can judge from the letters received, we have fully succeeded. One young man writing from near

Huntingdon, says: "No two dollars that I have spent since I graduated has repaid me so much, as the two I now send you for the *Record*." Another writing from the Townships says: "I like the *Record*; it is so practical. From every number I have gained some information, which I have found very useful to me in practice." Another in Cumberland, Ont., writes. "I hope the profession generally will sustain you." A subscriber in Sherbrooke writes: "There are many things I like the *Record* for, and hope it will be a success." Another in Seaforth, Ont., says: "I think a good deal of the *Record*, and wish to have it on my list of periodicals." A friend in Fergus, Ont., says, "I am sure the *Record* will receive that support, which it so well deserves, while it keeps up to its present standard. A Quebec subscriber says: "I like it well, better than any Canadian Medical Journal I have yet seen, and wish it every success." From Glanford, Ont., a subscriber says: "From a careful perusal of the numbers issued, I feel confident that such a Journal cannot but meet with the approbation of the profession at large." From the good old city of Kingston, one of its prominent medical men writes: "I like your Journal, and wish you much success in your enterprise." A medical man in London, Ont., who had seen the *Record*, when ordering it to be sent to him says: "Allow me to say to you by way of encouragement, that I am much pleased with the numbers of the *Record*, that I have seen. In my humble opinion, your Journal is far in advance of any other Medical Journal published in Canada." We could add many more, but our modesty prevents us. We, however, thank our friends, for their kind words of encouragement—they have done much to cheer us in our laborious duties. We are glad that the *Record* has pleased so many, and our endeavour in the future, as in the past, will be to present to our readers what we promised in our first number, viz. "A live Journal."

UNIVERSITY OF MCGILL COLLEGE.

The annual convocation for conferring degrees in medicine took place in the William Molson Hall on Friday the 25th March.

Dr. George W. Campbell, Dean of the Medical Faculty of the University, announced the following gentlemen as having passed their Primary Examination on Anatomy, Chemistry, Materia Medica, Institutes of Medicine and Botany or Zoology.

Bigelow, H. C., Boston, Mass., U. S.; Cameron, J. C., Montreal, Quebec; Chevalier, N., St. Gregoire le Grand, Quebec; Cline, J. D., B. A., Cornwall, Ont.

tario; Cutter, F. A., Hopkinton, New York, U. S.; Harvey, W. A., Newbridge, Ontario; Henderson, E. G., Belleville, Ontario; Hickey, S. A., B. A., Aultsville, Ontario; Hockridge, T. G., Bradford, Ontario; Hume, W. L., Leeds, Quebec; Jones, C. R., Hastings, Ontario; Jones, G. N., St. Andrew's, Quebec; MacDonald, R. A., Cornwall, Ontario; McBain, J., Williamstown, Ontario; McCormick, A. G., Durham, Quebec; McDonell, A. R., Loch Garry, Ontario; McMillan, A. E. J., Edwardsburgh, Ontario; Mines, W. M., Montreal, Quebec; Molson, N. A., Montreal, Quebec; Monk, G. H., Montreal, Quebec; Moore, C. S., London, Ontario; Moore, J. T., Holbrook, Ontario; Norton, T., Montreal, Quebec; Pattee, R. P., Hawkesbury, Ontario; Phelan, J., Stratford, Ontario; Prosser, W. O., Lunenburg, Ontario; Rattray, J. C., Portage du Fort, Quebec; Reddick, R., Prescott, Ontario; Ritchie, J. L., Halifax, Nova Scotia; Rogers, A., Bradford, Ontario; Sinclair, St. Thomas, Ontario; Speer, A. M., Richmond, Quebec; Wales, B. N., St. Andrew's, Quebec; Wallace, I. W., Milton, Quebec; Woolway, C. J., St. Mary's, Ontario.

The number of students who passed their final examination for the Degree of M. D. C. M., was 35, alphabetically arranged as follows with the subject of the thesis:—

Alguire, D. O., Lunenburg, Ont., Auscultation; Bell, R. W., Carleton Place, Ont., Post-partum Hæmorrhage; Brown, H., London, Sleep and its Derangements; Carmichael, D. A., Beechburg, Chronic Bright's Disease; Chevalier, N. E., St. Gregoire le Grand, Q., Intermittent Fever; Cutter, F. A., Hopkinton, N. Y., U. S., Cerebro-Spinal Fever; Edwards, O. C., Clarence, Ont., Sph. Affections of Nervous System; Ellison, S. R., St. Thomas, Ont., Lobular Pneumonia; Ewing, W., Hawkesbury, Ont., Urinary Calculus; Farley, J. J., Belleville, Ont., Physical Diagnosis; Fortune, L. M., Huntingdon, Quebec, Erysipelas; Gaviller, E. A., Bond Head, Ont., Erysipelas; Guest, T. F., St. Marys, Ont., Tubercular Meningitis; Hills, J., St. Gregoire, Quebec, Diabetes Mellitus; Hurlburt, R. N., Mitchell, Ont., Syphilis; Jackson, W. F., Brockville, Ont., Diphtheria; Jones, H. J. M., Montreal, Quebec, Aphasia; Kelly, T., Durham, Ont., Epilepsy; Kittson, E. G., Hamilton, Ont., Alcohol; McGuire, B. D., Joliette, Quebec, Asthma; McConnell, J. B., Chatham, Quebec, Bronchitis; McDiarmid, J., Prospect, Quebec, Variola; McDonald, J. D. A., St. François du Lac, Q., Phlegmasia dolens; McLeod, J. Wigg, P. Ed. I., Pathology of Inflammation; O'Brien, R. S. B., L'Orignal, Ont., Hygiene of Childhood; O'Brien, D., Almonte, Ont., Acute Rheumatism; Perry, H. R., Coteau Landing, Quebec, Rickets; Richmond, P. E., N. Y. State, U. S., Acute Rheumatism; Shepherd, F. J., Montreal, Quebec, Hospital Reports; Stephenson, J. A., Cayuga, Ont., Puerperal Fever; Tracy, A. W., Island Pond, U. S., Vaccination; Waleon, G. O., Montreal, Quebec, Progressive Locomotor Ataxia; Ward, W. T., Boundary Line, Quebec, Ovariectomy; Young, R. C., Barton, Ont., Erysipe-

las, Whiteford, J. W., Belleville, Ont., Cholera Infantum.

Three of the above-named gentleman, Messrs. Alguire, Ewing, and Jackson, have not yet completed their twenty-first year, and cannot, on that account, receive their Diplomas at this Convocation.

MEDICAL FACULTY, UNIVERSITY OF BISHOP'S COLLEGE.

The following gentlemen successfully passed their primary examination for the degree of M.D., on the 24th and 25th of March, viz.:—George F. Slack, M.R.C.S., England, Montreal; Robert Costigan, Montreal; Robert Frederick Godfrey, Montreal; Mr. George B. Shaw, Ottawa, Ontario; Mr. F. C. Lawrence, Richmond, Quebec; and Mr. William M. Hunter, Cornwall, Ontario. The following gentlemen successfully passed the final examination for the degree of M.D., on the 27th and 28th of March, viz.: George F. Slack, M.R.C.S., England, Montreal; Robert Frederick Godfrey, Montreal; Mr. George B. Shaw, Ottawa, Ontario; Frederick C. Lawrence, Richmond, Quebec; William MacDonald, Montreal; Godfroi Dubuc, Chambly, Quebec; Isaac Fontaine, St. Barnabé, Quebec; G. Upton Peltier, St. Guillaume, Quebec.

The Convocation for the conferring of Degrees in Medicine took place at Lennoxville, on the 3rd of the present month.

CREDITABLE TO CANADIANS.

At the last Annual Meeting of the American Pharmaceutical Association, Mr. Grassly, Chemist of Chicago, reported on query No. 33, "In how far do the Seidlitz powders of the market agree with the quantity and quality of the formula of the United States Pharmacopœia?"

The reporter collected 165 samples from 14 different States of the Union, and the Dominion of Canada, (representing 19 of the principal cities,) and subjected them to an exhaustive quantitative and qualitative examination.

In the explanatory remarks appended to the tables containing the result of the analyses, the reporter says: "all those received from Canada were made of good materials, and free from impurities." In contradistinction to which, the samples from the United States were generally very far below the official standard, and not at all creditable to American pharmacy.

We are glad to see our Canadian pharmacists compare more than favorably with those of the United States. It goes to shew that men who can conscientiously fulfil such minor duties as the making of a

simple Seidlitz powder, may well be trusted with the more important ones, which they are daily called upon to perform.

ORBITUARY NOTICES.

DR. ROBERT NELSON.

Many of our readers will regret to hear of the death of the late Dr. Robert Nelson, at the ripe age of 79. He had been suffering from hemiplegia for some twelve months past; the disease, however, did not show any very dangerous symptoms until seven weeks ago. He died at his private residence Staten Island, near New York, on Sunday, the 2nd March. After having secured a handsome competence, he had retired from practice some four years ago, and was succeeded by his only son, Dr. Eugene Nelson, M.R.C.S., England, who still practices in New York. Dr. Robert Nelson was born in January, 1794, and at an early age was apprenticed to the late Dr. Arnoldi, of Montreal, and even before he was admitted to practice he had raised a reputation for himself as a talented and clever young man, and one likely to rise to the head of his profession. He served through the war of 1812, as surgeon to a regiment called the "Indian Warriors." Being fond of Surgery, cool, and having plenty of nerve, he soon made a name, as one of the most celebrated surgeons of the day, patients coming to him from all parts of Canada and the adjoining States. He was one of the attending physicians of the Hotel Dieu Hospital, and there had an ample field in which to exercise his liking. He operated during his residence here some *sixty-five* times for urinary calculi, very successfully. In 1823, an attempted suicide divided the carotid artery, Drs. Robertson, and Caldwell, ex-army surgeons, (one had been through the wars of the Peninsula) were called in, and refused to ligature; Robert Nelson, still very young in his profession, being only 29 years old, was sent for, and successfully ligatured the artery, and saved the patient's life. He was, we believe, the first surgeon to ligature that vessel in Canada. This patient afterwards suffered from asphonia, and proceeded to England, where he consulted some of the London celebrities of the day, one of whom stated that nothing could be done for him, and remarked, "fortunate is the country that possesses such a man."

On another occasion, an influential patient of his had a ball lodged in his thigh for a considerable time, and which Dr. Nelson was unable to extract, proceeded to England, to consult some of the surgeon's there. These, on ascertaining who had attended him in Canada, said "if Dr. Nelson is unable to do

anything for you, we are perfectly sure we can do nothing." The gentleman returned, and died without having the ball extracted.

He was for a time President of the Medical Board for the District of Montreal.

He was twice returned to Parliament, having been mixed up with the politics of the day. Mr. Papineau's friends were exceedingly anxious that he should be returned to Parliament, but he did not possess the necessary influence, and Robert's name was added to the ticket, he having an immense practice, and great influence, and through that influence, and the assistance of friends, they were jointly returned. The elections, at this time were almost invariably made scenes of riot and disturbance. At his last election for the West Ward, in 1834, the polls were closed before all the votes were taken owing to the violence of the mob, and the following proclamation was issued:—

"Proclamation.—It being impossible to continue the elections of the West Ward of the City of Montreal with security to myself or the citizen electors, I think it my duty to terminate the election, and I do proclaim duly elected, to represent in Provincial Parliament the West Ward of the City of Montreal, the citizens Louis Papineau and Robert Nelson, as having the majority of votes, as it appears by the poll book of the West Ward of the City of Montreal.

(Signed,) Charles André Lusignan,
Returning Officer."

During this year, Montreal was again visited by the Asiatic cholera, which raged with equal, if not greater severity, than in 1832; during these periods he was Executive Officer of the Medical Board, and received daily reports from the City practitioners, collected statistics, etc., from various sources, from which he has since written and published a book, entitled "Nelson on Cholera," which gives a clear and succinct account of the invasion of cholera in the periods named, its history, modes of treatment, etc. This work was not published until 1866, and appeared first in New York.

He translated Hupeland's System of Medicine, and has written several valuable articles for Medical publications, as well as a disquisition on the difficult subjects of Contagion and Infection. He also published a treatise, in pamphlet form, on Ovariectomy.

He did not take any active part in the troubles of 1837, but was arrested, and cast into prison, on the news arriving of the result of the fight between his brother the late Dr. Wolfred Nelson, who commanded the Rebels at St. Denis, and the Royal Troops, in

which the latter were defeated, and had to retire with their dead and wounded. After a time he was liberated on bail.

The year 1838 was the most eventful period of his career, when he played a conspicuous part in the affairs of his country, and figures in its history for that period. He was induced by a number of dissatisfied and disloyal persons of Canada, as well as some "sympathisers" from the States, to take up arms against his country, and thus entered into the chimerical scheme of invading Canada. He was chosen President of the Republic, as it was termed, and issued a long Proclamation, which bears his name as such, which our readers will find in Christie's History of Canada. He commanded at Odelltown; the attempt proved abortive, and awfully disastrous to those engaged in it. His property was seized and sold, and he was compelled to leave the country, and proceeded to California, where by patient industry he amassed a considerable fortune. After years of practice he left for New York, on a visit; and on his return found that all his hard earned savings had again been lost, through being carelessly managed by his agent in his absence. He again returned to New York, and after an absence of three years in Europe, where Mrs. Nelson died, he again returned and practiced as a consulting physician and surgeon, up to some four years ago, when he retired, on a handsome competence, as we have already stated, to a beautiful residence, that he had erected on his private property on Staten Island.

Robert's brothers Wolfred and John also studied medicine, all three obtaining licenses to practice from the Medical Board, as it was then termed, of the City of Montreal, in the early part of this century. He was the third son of the late Mr. William Nelson, a native of Newsham, England, and a grandson of the late Mr. George Nelson, of Shields, England. He was named after a great uncle, Robert Nelson, one of the projectors and the architect of the original London Bridge over the Thames. His brother, Dr. John, was drowned, while crossing from Sorel to Berthier, in 1833. The late Dr. Wolfred Nelson, the late Mayor, Chairman of Board of Prison Inspectors, etc., etc., etc., died in 1863.

His grandfather, George, was a first cousin of Lord Nelson's, with whom he played in his youth. The family is connected with the Heads—the family of our late Governor General, Sir Edmund Head.

Dr. Robert Nelson was a man of small figure, active and energetic, with a quick piercing eye, eccentric in habit and manner, concise in his way of speaking, his remarks being few and full of meaning,

and to the point, as many of his former confreres and political adversaries could testify.

To this date, there have been eight doctors in the family. Of the sons of the late Dr. Wolfred, Dr. Horace, formerly Professor of Practice of Medicine in the old St. Lawrence School, died in Dec., 1863, and Dr. Alfred Nelson in February of this year; the remaining three are practicing. Dr. Henry Nelson, in Sacramento, California, Dr. Eugène Nelson, in New York, and Dr. Wolfred Nelson, St. James Place, in this City.—*Communicated.*

CHARLES PICAULT, M.D.

Not a few will hear with regret that Dr. Charles Picault is no more. After an illness—not of very long duration—he expired on the 23rd of March, and on Wednesday, the 26th, his remains were followed to their last resting place in the Catholic Cemetery, Cote des Neiges, by a large number of sorrowing friends. Charles Picault, M.D., was the son of Dr. P. E. Picault, for a great many years a practitioner in Montreal. He pursued his studies at McGill College, and graduated in 1857, since which time he practised in connection with his father. He was warm-hearted and impulsive, and among his fellow-students at College was a universal favorite.

PERSONAL:

Dr. Lewis G. Hunt, graduate of McGill College, 1871, is at present in charge of a practice in Stockbridge, Hull, near Sheffield, England. We, however, believe, that it is his intention to return to his native city, Halifax, N.S., during the course of the ensuing summer.

We understand that the Hon. Dr. McNeill Parker has returned to Halifax, after a year and a half passed in Europe, principally in Edinburgh.

Dr. Wallace Clarke (M.D. McGill College, 1871) now of Marquette, Michigan, was in Montreal last month, on a visit to his friends. We are glad to hear of his success in the West.

Dr. Geo. Ross, late House Surgeon of the Montreal General Hospital, has been appointed Professor of Clinical Medicine in McGill College, and Dr. Roddick, the present House Surgeon of the Montreal General Hospital, has been appointed lecturer on Hygiene in McGill College,

J. Baker Edwards, Ph.D., D.C.L., Professor of Chemistry in the University of Bishops College, has resigned his chair, owing to ill health. He how-

ever, still remains on the Professorial staff, as Professor of Practical Chemistry and Microscopy.

Dr. James J. O'Dea, (McGill College, 1859), formerly of Toronto, is practicing at Clifton, Staten Island, New York, the position he has attained is such as would have been anticipated by those who knew his talent and his application when a student of medicine. An admirable article from his pen on the abstruse question of the "Physiology and Psychology of dreams," appears in the February number of the *New York Medical Journal*.

Dr. Rottot operated for ovariectomy at the Hotel Dieu Hospital, on Saturday, the 29th March. The case was, we believe, a favorable one, and at the time we go to press the patient, we are glad to learn, is doing well.

Dr. Perrigo Montreal, reports a case of premature labour at six and half months, occurring in his practice, where the child presented by the breech and where there was nearly spontaneous amputation of the right wrist by the cord being twisted around it. The child had also a cleft palate and an enormous hare-lip. The child was still-born.

Reviews.

Clinical Lectures on Diseases Peculiar to Women, by LAMBE ATHILL, M.D., Univ. Dub., Fellow and Examiner in Midwifery, King and Queen's College of Physicians; Vice-President Dublin Obstetrical Society; Obstetric Physician to the Adelaide Hospital, Dublin; and formerly Assistant Physician to the Rotundo Lying-in-Hospital. Second edition with six lithograph plates and wood-cut illustrations; Philadelphia, Lindsay & Blackiston; Montreal, Dawson Bros., St. James Street.

The fact that a second edition of this little compendium of diseases of women has been called for within one year attests the high estimation in which it is held by the general profession. The wood-cuts are good, and the printing neatly executed on tinted paper. The whole get up is, in fact, in Lindsay & Blackiston's best style.

Dr. Athill divides his book into fifteen lectures. The 1st lecture treats upon the importance of and the ways in which we can make a thorough diagnosis, of uterine diseases. There can be no doubt that many valuable lives are lost or rendered miserable for want of this class of diseases being more cor-

rectly understood by the general practitioner. The bivalve speculum is recommended as preferable to any other, an opinion which every one will endorse who has had much to do in the treatment of uterine disease. Ferguson's instrument is preferable only in those cases where the entrance to the vagina is so small as to prevent the use of the bivalve. The importance of the uterine sound is dwelt upon as an invaluable aid to our diagnosis, and its mode of introduction illustrated.

Lecture II. is occupied with Leucorrhoea; its characteristics, sources, varieties of (i.e. vaginal, cervical, and uterine) vaginitis, treatment, vaginismus. The author in this chapter has not only given the latest theories and practice connected with the above named subjects; but has laid before us new and valuable modes of dealing with Leucorrhoea, but more especially with regard to the treatment of vaginitis. Infusion of tobacco a drachm to a pint of boiling water as an injection is highly recommended, especially when co-existent with pruritis of the vulva. The application of glycerine on cotton wool is also advised, and other means are brought before us to render our treatment of this very troublesome disease successful.

Lectures III. and IV. are upon Amenorrhoea and Dysmenorrhoea, and are up to the latest views.

Lecture V., on Menorrhagia, is one of the most valuable in the book. The treatment recommended in those cases not due to tumors or polypi, places valuable suggestions before those who have to deal with that often severe, and sometimes almost intractable disease.

Lecture VI., on Uterine Polypi, is all that could be desired. The various ecraseurs are mentioned, and the value of steel wire over iron wire rope is pointed out; also the author's ecraseur (a modification of Gooch's) is illustrated, and seems to be the best instrument extant for the removal of intra-uterine polypi.

Lectures VIII. and IX. are upon Fibrous Tumors and Ovarian Cystic Disease, and embrace all the known facts connected with these subjects.

Lecture XI., on Inflammation of the Cervix, is of great practical value, and contains many important suggestions with regard to the treatment. The use of the scarificator is insisted upon as the best means we possess for relieving a congested os, and preparing it for the application of astringents or caustics. With regard to caustic applications to the cavity of the cervix and body of the uterus, the author strongly recommends that the canal be dilated by means of sea tangle, so as to allow of the surface being

thoroughly touched and the free escape of the subsequent discharge. The mode of applying caustics is worthy of attention, and we would commend a practice long adopted by ourselves, which is at once cheap and efficient, viz., to use a splinter of ash or elm wood 12 or 15 inches long, and as large as a pipe-stem, having the end to be introduced reduced to about one-eighth of an inch and notched near the end. On this rough end a fine even piece of cotton-wool is carefully rolled to any desired size, according to the patency of the cervical canal. This holder thus prepared is charged with any kind of fluid and applied with ease to any desired part. Dr. W. Playfair recommends a soft metal bougie of similar shape, but it possesses no advantage over its wooden competitor, and is not so good for the use of the mineral acids, as it is acted upon by them. Before leaving this subject we may say Dr. Athill strongly commends nitric acid as a local application in this disease.

Lecture XII. is devoted to the consideration of Chronic Inflammation of the Cervix, and endometritis and endo-cervicitis, and their treatment, and is replete with all that is known upon the subject.

The remaining three lectures are devoted to the subjects of uterine displacements, enlargements and the different forms of malignant growths, and are in keeping with the general excellent tenor of the work.

No one can rise up from the perusal of this work without feeling he has gained many valuable suggestions with regard to the treatment of diseases of women. We cordially commend the work to every member of the profession as the best small work extant. The book is to be had of Messrs. Dawson & Brothers, St. James street, Montreal.

Report of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

MEETING HELD MARCH 7TH, 1873.

Dr. R. Palmer Howard in the chair.

Dr. Thomas Simpson read a case of a woman who had been in labour twenty-six hours, and had been attended by an ignorant midwife. He found her exhausted; countenance anxious; pulse rapid and small; genitals swollen and contused; vagina tumid, dry and hot; all intolerant of pressure and manual examination. Both arms of child protruding, flaccid; the right humerus broken. The child lying across pelvis, shoulders forced into brim, its head flexed backwards, and the occiput resting between the scapulae.

The uterus was in a state of continuous contraction and embracing the child. The midwife had been pulling at the child for hours. The alarming symptoms demanded immediate delivery, and as he was far out of the reach of professional advice he had to act entirely on his own responsibility without assistance. Version was impossible, child in all probability dead. The blunt hook was passed over the neck steadied by an assistant, and the neck severed little by little by means of strong scissors. The delivery was rapidly effected, and the placenta came away immediately.

Dr. Simpson said, there has been a great deal of difference of opinion as to the relative merits of decapitation and evisceration in these cases. British practitioners were, as a general rule, averse to the former and older operation; the chief objection being that after the delivery of the body the extraction of the head was often attended with considerable difficulty and delay. Of late years, however, decapitation has come into favour, and is practiced by some of the leading accoucheurs in Europe. Sir James Simpson considered it a safer operation than evisceration, and easier of performance. It must be remembered in favour of evisceration that throughout we maintain a control over the head, and are able to exert considerable extraction force by means of the attached body, and if further instrumental assistance be necessary, the crotchet, or perforator or forceps may be more readily and expeditiously used.

A brief discussion ensued, and a vote of thanks having been passed to Dr. Simpson, the Society adjourned.

BIRTH.

At Cornwall, Ontario, on the 22nd instant, the wife of T. B. Tracy, M.D., of a daughter.

DIED.

In this city, on the 23rd inst., Charles Picault, Esq., M.D., eldest son of P. E. Picault, Esq., M.D., Vice-Consul for France.

At Longueuil, on the 26th instant, at the age of 34 years and 4 months, Rosalie Brauneis, beloved wife of Dr. Larocque, M.P.P.

On March 9th, at St. Germain, P.Q., after a short illness, Thomas E. Foster, second son of Dr. W. E. Foster, of West Shefford, P.Q., aged 15 years.

At Philadelphia, on the 26th February, Hugh L. Hodge, M.D., aged 77 years, late Professor of Obstetrics in the University of Pennsylvania. He entered upon the duties of this chair in 1835, and fulfilled them till 1863, when advancing years compelled him to resign. In 1861 he published a work "On the treatment of Diseases of Women and Children;" and in 1864, "On the principles and practice of Obstetrics."

At his residence Staten Island, New York, on Sunday, the 2nd March, Robert Nelson, M.D., aged 79 years, formerly of Montreal, brother of the late Dr. Wolfred Nelson.

MONTREAL:

Printed by JOHN LOVELL, No. 23 & 25 St. Nicholas Street.

Original Communications.

Case of fractured ribs, Emphysema and Pneumothorax, Paracentesis Thoracis—recovery. By G. L. MACKELCAN, M.D., Hamilton, Ont.

Nov. 20th, 1872, was called to see H. C., aged 61, who had been run over by a waggon an hour before. Found fracture of 5th, 6th and 7th ribs at the angles on the left side, emphysema of the cellular tissue opposite. The seat of fracture well marked, the skin being raised up about three inches, and crepitation well marked. Pulse slow and irregular, respiration very painful. Applied broad bandage round the chest and gave an opiate.

24th. Emphysema has extended up over the chest and neck as far as the occiput. The left chest nearly filled with air. Emphysema has subsided.

Dec. 1st. Complete pneumothorax of left side. Increased resonance on percussion; no respiratory murmur audible. Egophony and metallic tinkling well marked. Gradually, the left chest filled with fluid to a point two inches above the nipple. Dyspnoea became very great. Respirations 40 per minute. Cannot lie down, and has very severe attacks of dyspnoea, generally in the evening.

Dec. 23rd. Decided to perform paracentesis thoracis as the old man was sinking, and there seemed to be no prospect of his recovery. Having no proper aspirator, improvised one from a common enema apparatus by attaching an extra piece of tubing to the lower end. There being air in the chest already it was not used for the purpose of excluding air, but of pumping out both fluid and air. Assisted by Dr. Mackintosh proceeded to tap with a fine trochar and canula. Withdrew the canula and slipped the end of the tubing over the canula and slowly drew off more than two quarts of sanguineous serum and a quantity of air, completely emptying the chest so that the respiratory murmur could be heard, though feebly, all over the left side. The dullness on percussion, also, entirely disappeared, and the dyspnoea was entirely relieved. The fluid accumulated again to a small extent for about a month, (during which time he suffered a good deal of dyspnoea), and gradually disappeared under a course of diaphoretics and diuretics.

Feb. 14th. The old man has entirely recovered. Respiratory murmur is good all over the left chest, and he is now able to walk two or three miles without any inconvenience.

Address to the graduates in Medicine, delivered at the Second Annual Convocation, of the Medical Faculty of the University Bishop's College, April 3rd, 1873. By ROBERT T. GODFREY, A.M., M.D., Professor of Surgery.

MR. CHANCELLOR, MY LORD, GENTLEMEN GRADUATES,

It is my privilege to address you a few words of congratulation and advice on this occasion.

The pleasure of congratulating you on the successful examinations you have just passed, is grateful to me: particularly so, when you, by your application and assiduity, your deportment and attention in the lecture room, as well as on all other occasions, have gained for yourselves the respect and esteem of every Professor in the College.

We are about to separate: a feeling of regret steals over me at the thought of losing the friendly smile and pleasant daily greeting which have so long been exchanged between us, and helped to cheer and excite your teachers in their exertions on your behalf.

Although the mental labor for lectures of an hour's duration for six months requires much time and self-denial, yet, when the results have been so satisfactory to us, we consider ourselves amply rewarded for the sacrifice.

You, gentlemen, know that listening to seven or eight lectures daily, produces an amount of nervous prostration which none but the experienced can understand.

It has grieved me, towards the close of the session, to notice stealing over your features the pallor consequent on your mental exertions, and close application to your studies. I trust that after a period of repose, you will all soon regain your usual health and strength.

Before bidding you farewell I shall say a few words to you on your future duties and new relations to your fellow men.

You, gentlemen, have devoted the short period of four years to the study of a profession which, for convenience of teaching and reference, has been divided into numerous branches; to perfect you in any one of them it would take the whole of that period. But as our lives are short, you will be required to make the best use of every spare moment that is left you to prosecute your studies. You are now aided by works on the different branches of your profession, written by men who would have been a credit to any age. You must remember that all the books which have ever been written cannot

make you good practitioners unless you study and think over each case for yourselves; bringing all your knowledge to bear on it which you have acquired in Anatomy, Physiology, Hygiene, Pathology, and each and all the other branches.

To those of you who reside in the country, and have not an opportunity of calling in the assistance of your seniors in the profession, I would recommend you to make yourselves familiar with the construction and manufacture of the different kinds of instruments and appliances you may be called upon to employ.

In your reading I trust you will not confine yourselves to your text books only; but study different standard works.

I would advise you to keep pace with the medical literature of the day, and, in addition to the local periodicals connected with our profession, I would recommend you to read the London *Lancet*, in every number of which you will find matter applicable to your present wants. It will make you familiar with the practice of the great medical men of the present time, and you will also be made acquainted with the different forms of disease and epidemics prevailing in various parts of the world. Some of the epidemics which advance like a great wave over the surface of the earth, you will be partially prepared to meet; amongst some of these I might class cholera and cerebro-spinal meningitis. The latter had its origin in the Southern States, and was first treated in Montreal by Professor Gardner of this University.

I trust the knowledge you have gained in Chemistry and Vegetable Physiology will enable you to be useful to your fellow men in the rural districts. You must always consider it a duty to aid in every possible way in developing the boundless resources of this our great country. At the same time, I would advise you not to have any hobbies out of your legitimate occupation. The range it embraces is so large that you can always employ in your profession your spare moments; otherwise your first love will be forgotten and yourselves also; know your profession thoroughly, the public will soon learn whether you do or not, and appreciate you accordingly.

I would advise you when you have made up your minds to settle in a locality to avoid leaving it without some very grave reasons.

Should you reside in the city, or have an opportunity of occasionally visiting it, you should always attend the hospital. Your Clinical teachers will be pleased to see you, and be able to point out to you

something new and instructive. You must not suppose, that because you belong to this University you may not be so well received as the students of other colleges. Of this you must disabuse your minds, for through the liberality of the Governors of the Montreal General Hospital its doors are thrown open to you, as well as all students, no matter to what school, university, sect or nation they may belong. I may also state that the Hotel Dieu granted our students tickets when applied for without hesitation. This being the case it gives us all the Hospital accommodation we require.

There is one shoal upon which thousands of our most promising members are wrecked. I allude to the vice of intemperance. There is no profession in which you are so much exposed to temptation as ours. In your long and weary drives, in cold and storm, your anxious watchings over tedious cases, you may be prompted to use stimulants, but you must make a standing rule at the outset of your career—never to take stimulants in a patient's house.

You must always be watchful that the slightest suspicion or stain of any kind should never be attached to your character.

You will be considered a fair mark for the censorious portion of the public; but you must, by your upright conduct and kind manners, so win the respect and esteem of your fellow men that the venom of their tongues will only help to sear their own guilty consciences, and leave you to follow your path of usefulness and integrity.

I know of no profession in which a man requires to plant his foot so firmly on the portals of Heaven as in this upon which you are entering; that Heaven may grant you that power will always be the wish of every Professor in this University.

Before saying farewell, I trust you will always take an interest in your Alma Mater, and to those of you who shall win your spurs from the public, and good report of your confreres, the Medical Faculty of this University will always be open should you take an interest in teaching the art and science of your profession. Although you leave us for the present you must remember that we do not shut the door behind you, nor compel you to seek in other lands the position which you desire in our own.

I shall now take my leave of you by wishing you a happy, useful and honorable career; and saying farewell.

The Graduates' Valedictory Address at the Second Annual Convocation of the Medical Faculty of the University of Bishop's College, April 3rd, 1873.
By GEO. B. SHAW, C.M., M.D., of Ottawa, Ont.

MR. CHANCELLOR, MY LORD, MEMBERS OF THE UNIVERSITY, LADIES AND GENTLEMEN:—

Our assembling here to-day is testimony to the fact, that the second session of the Medical department of the University of Bishop's College is at an end.

I look upon this gathering as a sort of "harvest home," (if I may be allowed such a term,) where, as is usually the case upon such occasions, steady, persevering industry receives its due reward. It is an occasion where all is joy and thankfulness, where all goes merrily as the marriage bell. I feel thankful to my fellow students for having done me the honor of electing me to deliver the Valedictory Address, under such happy circumstances, and though I could have wished that the duty had been intrusted to one more practised and able in the art of addressing a large and learned assembly, yet I have not shrunk from the task, but on the contrary have much pleasure in undertaking the proud responsibility which rests upon me. It affords an opportunity of our bearing public testimony to the solid worth of our professors, and of bidding them an affectionate farewell at the close of a most pleasant, instructive and highly satisfactory session.

In reviewing the last six months, I can do so with feelings of unmingled satisfaction. It has in a measure been a period of toil, but the burden has been rendered light by the ever kind and courteous conduct of our worthy instructors. Too much cannot be said in their praise, either as regards professional attainments or kind and considerate behaviour. Condescending and obliging, ever ready to explain some difficult theory or whatever might not be readily understood, they nobly exerted themselves to impart to us a thorough knowledge of our profession, and with unwearied patience have carried the same cheerful demeanor day after day, throughout the entire session. We now tender them our sincere thanks, and bid them one and all an affectionate farewell. Long may they live and may each succeeding year still find them, as heretofore, in the lecture hall, successfully imparting knowledge to the embryo M.D.'s of Canada. We feel that we owe them much, but let them rest assured that their kind and courteous demeanor and untiring zeal during the past session will not be effaced from our memories by the lapse of years, but will ever continue to be a pleasant reminiscence of College days.

To my fellow graduates I would now say a few words. To-day we have reached one of the landmarks in the journey of life; our efforts have been crowned with success, and we have gained the much coveted degree of C.M., M.D. Let us be thankful and sternly resolve to be true to the obligations which we have just taken. We meet in a body to-day most probably for the last time, each one afterwards betaking himself to his allotted sphere of usefulness, but I fain would hope that the friendships formed during the period of our struggles are not to be so speedily ended. Let us hope that in days to come we may sometimes meet and talk over the good old days spent at Bishop's College.

In life, every station has its peculiar obligations, its difficulties and advantages; and the new position that we shall henceforth occupy, although freed from the irksomeness of the past, has many serious obligations, and the manner in which they are attended to and discharged will materially affect our individual success in life. Our mission is a noble one and embraces a wide field of usefulness. It is that of removing or alleviating disease, preserving health, prolonging life, sustaining the cause of religion and morality, and of assisting to form an age of liberality and usefulness.

In none of the numerous occupations of civilized society is it so necessary for a man to enjoy the perfect use of all his physical and mental faculties as in the medical profession, for in practice, important cases occur which demand our prompt attention and decision, and on these attainments the future happiness and welfare of ourselves and those under our immediate care will greatly depend. According to my idea, the chief requisite for the successful practice of medicine is what is called "good sense," by which I mean, the vigilant and ready exercise of the understanding and judgment in all the accidents of practice, and a prompt adaptation of "what we know, to what we have to do." A possession which though partly innate or a gift of nature, is capable of great development by cultivation. In what relates to a practical art, industrious talent with perseverance may acquire and arrange, genius may improve and adorn, but good sense must always direct.

Seeing then, that we shall be liable to be called upon at any moment to accidents, where a steady hand and clear mental faculties can alone be of service, strict sobriety must necessarily be a sine qua non with us throughout life; for on the event of a single hour may depend the fame or infamy of character and the honor or the disgrace of

professional acquirements. Beware then of strong drink. Touch not. Taste not. Handle not. Remember that at the last it biteth like a serpent and stingeth like an adder. Many fair prospects have been blighted by it and indelible disgrace and poverty firmly fixed, where permanent honor and success might otherwise have been achieved.

We shall hereafter be called upon to act upon our own responsibility, and I feel confident, that we shall all be found equal to the occasion, for the chief use of all our studying during the past four years and upwards, of hearing lectures, of dissecting, of hospital practice, has been to furnish materials for thinking, and so the great end of thinking is acting, the conversion of knowledge into practical wisdom. But although we have this day become graduates in medicine and "finished our education," as the phrase has it, we must nevertheless continue to be students, and apply ourselves diligently to acquire a further knowledge of the mysteries of nature, if we do not wish to be left behind by our compeers. In all our studies, gentlemen, in all our speculations, in all our researches and pursuits, let us recollect that to discover truth and to do good are of all things in this world most worthy of our labor, consideration and care; that all true and ennobling ambition, all for which life is really valuable and useful, resolves itself into duties of self-improvement, self-government and the communication of means of instruction to others. These duties comprehend every professional, every social, every private duty, and enter into every design which man can possibly conceive. In proportion to the advantages we have enjoyed, our engagement to these great duties are the stronger, and they are the only duties for which no worldly circumstances can disqualify us. To use the words of an elegant writer, "the science of medicine, like every other branch of natural knowledge, is not the production of a vigorous imagination, nor a lively invention, but it is the offspring of a long and diligent experience, and if a man attempts to learn it in any other way than by going to his patient's bedside and returning thence to his study again, he will find himself mistaken." Gentlemen, there is yet much to be done; many who have gone before us have made important discoveries and added valuable knowledge to our science, but let not this consideration lull us into inactivity, but rather let it excite us to additional exertions. There is a void which yet remains in our science to be filled up, and we ought all of us to labor and make such additions and improvements to it as our abilities and opportunities may enable us. We should direct

our most ardent studies to the works of Him who has ordained the production and disposal of every substance in nature, from the thin and almost intangible gossamer, that floats on the feeblest breath of air, to the massive and immovable rock, that withstands the most boisterous tempests of the ocean.

All men, it is allowed, are accountable for their time, but none more so than the medical practitioner. The man who with unwearied assiduity pursues his studies possesses a happiness within himself denied to others; the cares which rankle in the bosom of the ignorant and unamiable touch not his conscience, therefore let us not waste our spare moments in trifling pleasures or idle pursuits. If we neglect to register the experience which we have individually acquired, it becomes lost in forgetfulness; thus a man passes away, his name perishes from record and recollection, his history is a tale that was told, and his very monument becomes a ruin.

As in morals, so in science, there is a standard of ideal excellence, to which indeed no one can hope to attain, but which all may endeavor to approach. We may all follow in the great path of human exertion, adding our names to a long catalogue of men, who had the same hopes and fears, the same ambition and desires as ourselves. Pressing closely upon us, will follow another generation, succeeded by others equally busy and equally short lived. Then let us endeavor to conscientiously say whilst we live, as the immortal Harvey said, when reviled by his unworthy enemies, "I follow truth alone," and no little obstacles, no narrow opposition, no worldly disappointments need discompose us. And should we live to find our exertions rewarded by fame and gratitude, let it be our honest pride, in that advanced age, when the ear will be becoming dull to the voice of praise, and our feeble grasp must soon let go its hold on all influence, that we did not reach either the one or the other by mean arts or mischievous policy, but that all our dealings and conversation were governed by truth, and no less fair and open than our intentions were pure and honest, having kept pace with our years. Let us speak the truth from our hearts, and take heed unto the thing that is right, for that shall bring a man peace at the last. Let us look well to the end, and live as though we expected to die.

The practice of medicine then, as viewed as an intellectual and moral duty, is calculated to improve and elevate the mind, though an opinion has been

pronounced and entertained against us by some who have denounced our profession as leading us to deny the existence of a Supreme Being, and charging us with universal scepticism. If such an opinion were correct and just, it would pass a sentence of condemnation on all our proceedings and pages, and stamp a criminality on our very foreheads. But the records of Medical history, as well as the living examples of the present day, show us that all who have ever attained the rank of eminent men have been equally conspicuous for their moral worth, as for their professional productions in literature. This at once overthrows any argument or reflection which would tend to clothe us with infamy and disgrace. How is it possible that the study of anatomy and medicine, if properly cultivated, can plunge us into such a dangerous error? Can the contemplation of man, the noblest monument of creative power, lead us to doubt the existence of an Omnipotent Being? Can the knowledge of that inimitable mechanism by which every part is fitted for its office; of that structure which not only enables us to feel and move, but is the temporary abode of our intellectual faculties; of those laws by which life itself is carried on, or by their subversion extinguished; can the knowledge of these, I ask, convert us into infidels? Most assuredly not. I may here advert to Galen, a celebrated physician who lived in the reign of the Emperor Adrian. He studied anatomy at Alexandria, during which period and whilst engaged in dissecting human bodies (at the time a Pagan,) he became converted to Christianity, and on contemplating the order, structure and uses of the different parts of the system exclaimed "herein I acknowledge and praise our Creator, that He has been pleased to adorn His works beyond the power of art." By viewing the human body from its earliest formation, and watching it as it advances in growth, we are presented with a beautiful illustration of the wise and wonderful workmanship of Omnipotence, and enables us to trace the hand of unerring wisdom upon such firm ground as to render doubt absurd and atheism ridiculous.

Patience is a blessing to any man but more particularly so to the medical man, and it is a lesson that will have to be frequently studied. So long as human nature remains what it is, and so long as envy, hatred, malice and uncharitableness exist in the world, so long will there arise many things to try the temper. Under these diversified circumstances, the moral requisite most necessary to keep in mind, is a strict observance of the golden rule of practice "*mens conscia recti*," the consciousness of rectitude, and also "As you would that men should

do to you, do ye also to them likewise." This is a grand and sure guide, whether in relation to our professional brethren, to patients, or the every day concerns of life. This is the powerful and mind searching corrective and moral test, which makes that innate and predominate love of self the measure of love we should bear to our neighbours. From this virtuous principle will flow that kindness of manner, that benevolence of purpose which warms the heart of the poor sinking patient and raises his drooping spirits; whilst it withholds every thought, word or act, that might possibly tend to injure, in the remotest degree, our professional brethren. The exercise of this christian virtue, will shed a lustre around those who practice it, and will bring the most consoling feelings, under the most trying circumstances. It is the fruit of energy, patience and perseverance—attributes essential in the discharge of our professional duties, both to our brethren and to society.

In parting with our late fellow students, who are still upon the road so lately travelled by ourselves, I think I may offer a few suggestions for their guidance without being charged with self-sufficiency.

Firstly, I would remark, that all professions are arduous when duly attended to, the medical profession pre-eminently so, both in its acquisition and practice. It is with reluctance that I impress upon the student's mind, that the road to the temple of medicine is a series of rough and rugged ascents, truly an uphill course beset with stumbling blocks and mischances, but by the early cultivation of habits of order, method, accuracy, and dispatch, coupled with sobriety, perseverance and good manners, every difficulty may not only be overcome, but honorable distinction attained. The youth brought up in habits of industry, obedience and under parental control, gains an early triumph over idleness, inebriation and sensuality, and forms a character for life which contributes most powerfully towards future success.

Let me assure you that habits of diligence and attention, when once acquired, are easier and far more pleasant than superficial and negligent observation, so that the whole attainment, which once appeared so irksome and formidable, will become natural, easy, pleasant and every way to be preferred. In short, he who will persevere with patient steps to tread the path of knowledge will find the difficulties diminish as he advances; only let him go on as he began, and if there be no defect of intellectual capacity, if he is sober, courteous in his behavior, free from frivolity and immorality, he is not only certain of

success, but distinction. He will gain the approbation of the enlightened and wise, and what is still better, the satisfaction of his own conscience.

The tree of knowledge spreads forth its numerous branches in various forms, and as the human mind is not constituted alike in any two individuals, different opinions cannot fail to be entertained, as to what mode of study is best adapted for one destined for our profession; but judging from the lives of the most eminent men who have ever lived to grace our art, I consider that the primary mode of acquiring a sound and valuable medical knowledge, is to examine, as far as opportunity will permit, into the great book of nature, and there learn what she so mysteriously teaches. This, gentlemen, is the true spirit in which you must pursue your investigations; this alone is the means by which the territory of human knowledge can be explored, and although every student should, to use the words of the immortal Newton, but "resemble a child gathering shells upon the sea shore, with the vast ocean of undiscovered truth beyond it," yet it is only by industry that our researches will be rendered permanent and our learning useful.

As a noble instance of the truth of what I have advanced, I would here recall to your recollection the imperishable name of "John Hunter." By his own persevering efforts, did this great man raise himself from the lowest obscurity to a reputation wide as the world itself, and certain to last as long as the age in which he flourished shall be remembered by posterity. He studied the great book of nature, and hence proceeded both the patience with which he traced its characters and the rich and plentiful discoveries with which the search rewarded him.

I would next mention that politeness and good manners are an invaluable acquisition to the medical student. They commend him at once to the special care of his instructors, and smooth his rugged path in many ways. The Roman maxim, "*Ingenuas didicisse fideliter artes emollit mores nec sinit esse feros*," is as true now as in times past, for without this part of his education having been attended to, the student knows nothing of sentiment, and is usually governed by two predominant and paramount objects, the gratification of his passions and the appropriation to himself of every thing to which he may take a fancy, without the least consideration for the feelings of others.

But with these studies must be united a large acquaintance with those divine truths, which are the fountain of all human contemplation. It must never be forgotten, says Lord Bacon, in any system

of education, that religion is the cementing bond and preserving principle of civil society, and the source of all good and all comfort.

I would also advise you to become systematic in your habits, and you will be preserved from that besetting sin, procrastination, which is truly named the thief of time. Be sure that time misspent cannot be recovered, and that opportunities of acquiring knowledge neglected will entail upon you the loss of health, comfort and much self-esteem to redeem them.

Gentlemen, you have entered upon the most interesting of all studies, the study of man. What then is man, this being who is the subject of all our medical investigations? Of what is he composed? What is he to himself? How is he related to other beings and objects around him, animate and inanimate, and how are they related to him? How is he constructed? What are the natures and what are the influences of his passions and emotions? What are his physical, moral and intellectual faculties? What are the destinations of his existence on this globe? How is he capacitated to fulfil them? What are his resources when struggling with impediments from affliction? These questions are all within the embrace of medical science, and afford a field of philosophical enquiry, vast in extent, minute in detail and infinite in importance. Man, it is to be considered, is a material, a living, rational, a mortal, an immortal and an accountable being. What therefore is this power that since the creation and under obedience to the laws then enacted, generates, increases, adjusts, completes, regulates and repairs thus our bodily machine? What is this power which possesses that controlling influence over ordinary affinities; which preserves and directs all its parts to their destined uses; implants in them an innate repugnance to such things as may injure or impede them, and makes them shrink from those by which their integrity and co-existence may be endangered or destroyed. This is a power which mocks all human invention; it is characteristic of the Divine Architect.

I have endeavored to impress upon your minds the importance and the difficulties of acquiring a thorough practical knowledge of your profession; the dangers which are to be avoided, the greatest of which is the temptation of drink, for it includes all the rest; and the certain success which await sober, methodical, upright, industrious and gentlemanly conduct. We wish you a hearty God-speed, and let me assure you as one who had an opportunity of judging, that the Medical School of Bishop's College

affords you facilities for acquiring a knowledge of your profession, not surpassed by the world-renowned (and justly so) schools of Great Britain. Your success in life depends principally upon your own exertions, for it is well known that nearly all the great men who have ever lived, whether in our profession or in others, obtained their rank in life by their own perseverance, industry and liberality. During the past session we derived an additional advantage from a circumstance, which I feel sure will soon cease to exist, viz., the comparative small number of students. This was especially noticeable in the lectures on demonstrative anatomy, practical surgery and chemistry, where each student had the opportunity of examining for himself the most minute details of the subject under explanation. This I consider no slight advantage, for 'tis truly said that "the faithful sight engraves a knowledge with a beam of light."

On behalf of my classmates I must now thank the ladies for honoring us with their presence. It lends a durability to the pleasures of the hour, and without it every festive scene become vapid and dull. In every position in life we owe them much. As mothers we owe them everything and honor them. As sisters we find in them cheerful companions and true friends. As sweethearts we adore them, and as wives they become part of our very existence. None know better than the physician how to appreciate their services in the sick room at their true value, and what an able ally he often finds in them, in promoting the welfare of the patient by good nursing. The watchful care and soothing kindness of woman, her noiseless footsteps and airy touch, are the instincts of affection, and only require to be experienced to be prized above measure. We wish them every possible happiness. May they always take as deep an interest in the welfare of the University of Bishop's College, as they have this day manifested. We thank them for it, and promise that as far as we are concerned we will always endeavor to be deserving of a continuance of their favors and esteem.

In concluding, Mr. Chancellor, I beg, on behalf of myself and fellow classmates, to assure you how fully we appreciate the high honour of becoming graduates of such a distinguished and learned University as that of Bishop's College—"the Canadian Oxford," and how we shall always strive to do every credit to, and to sustain the name and fame of the "Old Country's Alma Mater," in this the New. May the parent stalk strike deeper roots into the fertile soil of Canada, enabling her to put forth new

branches in the various arts and sciences. May her resources be doubled and her usefulness yearly extended, keeping pace with the rapid progress and prosperity of this our beloved Dominion. FAREWELL.

Two years and a half in a London General Hospital.

By G. F. SLACK, B.A., C.M., M.D., M.R.C.S. Eng., late House Surgeon, Charing Cross Hospital.

Of the many affections of the jaws, teeth, etc., that come under notice in a London Hospital, none, I think, are more frequent than those brought on by the excessive use of mercury. This is to a great extent accounted for by the great prevalence of syphilis among the poorer classes. These people attend in hundreds at the different hospitals, dispensaries, etc., are examined and prescribed for by the attending surgeon. Without consulting a medical man again, some of them, either through ignorance or recklessness, go on taking their medicine for a considerable time, ascribing the soreness of the mouth, looseness of teeth, etc., to the effects of the disease and not of the medicine. When too late they find out their mistake and come for advice. The following case is an example :

A man, age 30, was sent up from the country with disease of the lower jaw. He had a clear history of syphilis, for which he had been treated at a dispensary in the country. According to his own account he had been taking blue pills for more than a month. He had gradually lost all his teeth, his mouth and tongue had been so sore that he could not eat solid food, and latterly pieces of his lower jaw had been coming away. His master, finding him unfit for work, sent him to London for advice. His treatment consisted simply in a most nourishing diet, quinine, exercise in the open air and occasional aperients. A few more pieces of dead bone came away, the gums then closed over, and the man went home quite well again. Such cases, only milder in form, come under notice almost daily, and can only be accounted for by the great prevalence of syphilis, the great use that is made of mercury in different forms in that as well as in many other diseases, and in consequence of this frequent use medical men become careless or forgetful about warning their patients against making too long a use of the medicines prescribed.

The following is a case in point :

A lady about 30 years of age complained to me about the gradual loss of her teeth, which had been coming away for the preceding year. On further inquiry she shewed me a prescription which had

been given her for menorrhagia a year and a half previously by a leading medical man. A small amount of mercury was contained in this, and he had neglected to warn her against the prolonged use of it. The consequence was she gradually lost a beautiful set of teeth.

Cases of enlargement of the glands about the jaw come frequently under notice, and are very interesting from the fact that generally speaking so much can be done to relieve them if a careful examination be made of each case. A superficial observer, especially if the patient be thin and pale, jumps at once to the conclusion that the enlargement is due to a scrofulous condition of the blood. If so, why are the glands about the body not enlarged? For this reason, that in four cases out of five the cause is local, and can easily be removed. Either a tooth is decayed, or the socket is inflamed, or a wisdom tooth is in vain trying to work its way through the gum. The irritation produced by any one of these causes, if long enough continued, will be found sufficient to produce enormous enlargement of the glands in the neighborhood, inflammation of these glands or even the formation of large abscesses about the neck. It is always advisable, when such cases present themselves, to make a careful examination of the mouth, teeth, jaws, etc., to see if such causes exist, and if they do, to remove them at once. The remainder of the treatment consists in attending simply to the general health of the patient, making no local application whatever. The following remarkable case supports what I have said:

A very pale delicate girl, age 20, was admitted in the following condition: there was symmetrical enlargement of the glands of the neck to such an extent that the outline of what had once been a very regular well-shaped countenance was completely lost. This state of things had been coming on gradually for a year. Her mother had sought advice for her at several hospitals, and had received the same answer at all of them, that this enlargement was due to a scrofulous condition of the blood, and that the only treatment that they could recommend was a course of cod liver oil and a prolonged residence at the sea-side. She was admitted into hospital with a view to giving her good nourishment, etc., preparatory to going to the sea-side. The surgeon under whose care she was placed fortunately for her had long taken a great interest in such cases. On making a careful examination of her mouth, he found the gum covering the wisdom tooth on each side thickened, inflamed and very painful. For more than a year she had suffered from this cause. The gum was carefully cut away so as fully to expose the crown of each tooth, and

care was taken afterwards to prevent its closing over again. She had a slight attack of facial erysipelas, from which she soon recovered, and from that time the swellings gradually subsided, the face began slowly to resume its natural form, and at the end of two months the girl went home quite well. I relate this case on account of the enlargements being perfectly symmetrical, which, without making a careful examination of the mouth, would incline one to say that the cause was constitutional. Many other cases came under my notice where the affection, whether simple enlargement or suppuration of the glands, manifested itself on one side only, the irritation existing on that side. In contrast to the case just related I might mention that of a girl about the same age, where the glands, not only of the neck but generally throughout the body, were enlarged, in the axillæ, groins, etc., which clearly pointed to a constitutional cause, whether scrofulous or not it was difficult to say. The following case of a small abscess situated in the angle of lower jaw, due to the irritation produced by a decayed tooth, will show how much suffering, disfigurement, expense and loss of time may be saved by careful attention to the teeth:

A housemaid, age 25, strong and otherwise healthy, was admitted with the following condition of the lower jaw on the right side. There was great thickening at the angle, the movements were very painful and much hampered, and there was circumscribed inflammation of the skin and tissues over the jaw. For a long time one of her teeth had troubled her, and in spite of the great agony she suffered, she refused to have it removed until the jaw was in the condition above described. The pain became greater, the movements of the jaw more and more confined, until she could not move it at all. About this time there was slight discharge of pus from an opening below the angle. Her general health continued good during this time, but the pain became so intolerable that she could obtain no sleep even with large doses of opium. She was placed under the influence of chloroform, an incision was made over the angle, and a small trephine was applied to the bone, which revealed a small abscess between the outer and inner plates. Great relief was experienced from this, and she made a slow recovery. An interesting case where removal of both upper jaws was performed is worth mentioning from the rarity of the operation as well as from the rapidity with which the patient recovered.

A strong healthy woman, aged 35, the wife of a soldier, presented herself in 1864 at Charing Cross Hospital with a tumor of the left upper jaw, which had been twice operated upon, and which she said

originated from a blow. The upper jaw on the left side was removed with the tumor, and the following is a description of its appearance as given at the time before the Pathological Society of London—"It consisted of the left superior maxillary bone, including its orbital plate, from the inferior surface of which appeared to grow a large tumor, which filled the cavity of the antrum, and projected forwards and inwards into the nasal cavity. There was also a second and loose portion the size of a walnut, which appeared to have been broken off during the operation, and was said to have projected posteriorly towards the pharynx. The tumor was of a firm, fibrous nature, and irregularly lobulated, and it had a dense capsule. Microscopically examined the tumor consisted of an abundance of fibrous tissue which formed the stroma containing innumerable cells, nucleated, usually containing several nuclei and frequently presenting a granular appearance. Large compound cells were abundant in the posterior and softer lobe of the tumor, and a few elongated cells were seen amongst the fibrous tissue. These large compound cells presented very much the appearance of the polynucleated cells met with in myeloid tumors."

In June, 1871, she returned to the hospital with a tumor of the right superior maxilla. On the 21st of that month the right upper jaw was removed, an incision being made along one of the wrinkles of the lower eyelid and down the side of the nose, the knife was then turned up into the nostril, and then the upper lip was divided in the median line. This flap was reflected on the cheek, the soft parts of the palate divided, and the jaw then removed with cutting forceps and Ferguson's lion forceps, no saw being required. The hemorrhage was slight and easily controlled. The edges of the wound were brought accurately together with numerous silver wire sutures and the parts left exposed to the air, no dressing of any kind being used beyond cleansing the mouth frequently with Condy's fluid. On the sixth day the woman sat up, at the end of three weeks she left the hospital perfectly recovered. The amount of disfigurement was very slight, the jaw on the left side, which had been removed several years before, having been replaced by a dense firm tissue which supported the cheek. The tumor in this instance filled the antrum, extended into the nasal cavity and forward, raising the cheek. It first attracted her attention about a year previously. She had suffered little or no pain except when handled. A careful examination showed nothing beyond a dense fibrous tissue. In the following December she

wrote to say that she had enjoyed perfect health since leaving the hospital.

I had opportunities of watching several cases of tracheotomy in adults as well as in children. In the children's cases it was always performed in croup and proved fatal in every case, notwithstanding that every care was taken in the after treatment to keep the air moist and warm, the tube free and clean, and to administer as much nourishment in each case as the child would take. I would here say that in none of these cases was the operation resorted to until all hope of saving life by other means had been given up. I am strongly of opinion that where recovery has followed the operation of tracheotomy in children suffering from croup, the same cases would have recovered without operation, and that in such cases the use of the knife is unjustifiable. The poor child is relieved for perhaps an hour or two, and then has to pass through ten or fifteen hours or perhaps more of the most frightful distress that any human being can be called upon to bear. I don't think that any man who has remained by the bedside of a child from the time of the operation until its death could ever be persuaded by any consideration to perform the same operation in a similar case again. In the case of adults the result is very different, whether performed for growths in the larynx, syphilitic usually, or for obstruction to the passage of air through the larynx by foreign bodies which have become lodged there, recovery is the rule, death the exception, however weak or exhausted the patient may be at the time of operation. I have seen tracheotomy performed twice in the same year on the same person, a woman about thirty years of age, suffering from syphilitic growths in the larynx. After the second operation she was obliged to wear a tube constantly. There is no doubt that, especially in children, the irritation produced by inserting and keeping a foreign body, the silver tube, in the trachea greatly increases the rate of mortality. If this could in any way be obviated, a greater number of recoveries would be the result.

65½ St. Antoine Street, Montreal.

To be continued.

Progress of Medical Science.

CASE OF POISONING BY CARBOLIC ACID

By T. H. BRABANT,

HOUSE-PHYSICIAN, ST. GEORGE'S HOSPITAL.

A CASE of poisoning by carbolic acid has recently occurred in St. George's Hospital, and as such accidents have been of rare occurrence, I think it may be interesting to publish a few short notes of the case.

On Thursday, February 13th, I was called in haste to come and see a patient—a woman aged forty-four, admitted the previous day with bronchitis and emphysema—to whom a nurse had by mistake administered strong carbolic acid instead of a dose of senna. I found the patient sitting up in bed, labouring under great dyspnoea, and apparently suffering acute pain. She was unable to speak, but kept her hands firmly pressed over the region of the sternum, as if to indicate that there was the seat of pain. She was very restless, and groaned continuously. The breath smelt strongly of carbolic acid, and the interior of the mouth and lips was charred white, and there was a brown scar on the chin. The pulse was quick (140 in the minute) and feeble. An emetic of sulphate of zinc mixed with olive oil was immediately administered, which she swallowed with great difficulty, and I afterwards endeavoured to get her to drink warm water mixed with oil, but without success, as the power of deglutition became lost. No vomiting ensued, and she soon sank into a state of stupor, the breathing became slow and stertorous, and the pulse excessively feeble. Dr. Barclay now saw the patient, and the stomach-pump was introduced by the house-surgeon, and warm water injected. She gradually sank, and died comatose fifty minutes after taking the poison. The amount of poison taken was not known at the time, but it was afterwards ascertained to have been nearly a fluid ounce of the impure commercial carbolic acid.

The post-mortem examination was made twenty-eight hours after death. There was a brown stain on the chin extending to the angle of the mouth. Old pleural adhesions existed on both sides. The left lung was greatly congested, the right emphysematous; the bronchial mucous membrane of both was injected, and the tubes full of frothy mucus. The left ventricle of the heart was strongly contracted, the right partly so; the organ was natural. Larynx and trachea natural. The mucous membrane of the mouth, œsophagus, and stomach was converted into a soft white material, giving the organ very much the appearance of being covered with a thin layer of white lead. This easily peeled off, exposing a bright-red surface beneath. These appearances ceased at the pylorus. The stomach was strongly corrugated, and contained about two ounces of brown fluid smelling powerfully of carbolic acid. There were a few congested patches in the duodenum. The ventricles of the brain contained about an ounce of clear fluid; the organ was otherwise natural. All the other viscera were natural. The blood was uniformly fluid, and on exposure became of a bright-red colour. No smell of carbolic acid could be detected in any of the viscera, with exception of the stomach.—*Lancet*, March 1st, 1873.

ON THE TREATMENT OF THE FEBRILE STATE.

By WILLIAM T. AITKEN, M.D., Professor of Pathology in the Army Medical School.

(*The Science and Practice of Medicine*, sixth edition, 2 vols., 8vo., pp. 944 and 1290. London, 1872.)

We quote in full Dr. Aitken's chapter on the gen-

eral principles which dictate the treatment of the febrile state:—

"To avert the tendency to death in the febrile state, it is necessary to observe how fevers naturally terminate favorably. Four modes are enumerated by Dr. Parkes, namely:—

"1. *By crisis*, in which the temperature falls suddenly in a few hours, and usually with some abundant excretory discharge, in which, possibly, much of the water which has been retained in the system is poured out.

"2. *By lysis*, in which the fall of temperature is gradual from day to day, till the normal standard is attained. The decline may thus occupy many days, the thermometer being known to take seven days in falling from 102° to 98° Fahr.

"3. *By a combination of these two modes*, namely, by a sudden fall of temperature to a certain point, and then a gradual decrease to the normal heat.

"4. *By a somewhat irregular alternation of febrile and non-febrile periods*, as shown by the temperature and the issue.

"When fever terminates by any of these modes, convalescence commences, normal nutrition is renewed, and the body begins to gain in weight. The blood is poor in albumen and in red particles; and there is now a danger that the rapidity of metamorphosis of tissue will exceed the healthy standard, as shown by the great tendency to lose heat, which convalescents from fever have. The temperature may fall, and the excretions may diminish below their healthy amount. Great care, constant attendance, and watchfulness are required when the patient begins to convalesce, if the fever has been long and severe; and the treatment of the febrile state itself may be thus generally stated as consisting in a combination of measures—(1.) To reduce excessive heat; (2.) To insure sufficient but not excessive excretion and elimination of paralyzed nerves; (3.) To act restoratively on the exhausted and semi-paralyzed nerves; (4.) To neutralize any specific poison which may have set up the fever, and so to improve the state of the blood; (5.) To relieve distressing symptoms; and lastly, To obviate and counteract local complications (Parkes, Murchison).

"(1.) *To reduce excessive heat*.—To accomplish this, the first indication, Dr. Robert Jackson, 'the patriarch of Military Medicine,' and after him, Dr. Currie, of Liverpool, in 1797, practised, to an extreme degree, the application of cold water—a therapeutic agency which is now again challenging attention, so that medicine, like history, constantly repeats itself. Jurgenson, Liebermeister, Hagenbach, and Küchenmeister are the most recent advocates and exponents of the application of cold water in the treatment of fevers. In health, such an application tends to increase the metamorphosis of tissue, as shown by Lehmann and Sandersou; and therefore its use in the febrile state requires the greatest care and caution. It is interesting to notice that Küchenmeister confirms the accuracy of Currie's own observation. To be of use, it must be employed very early in the fever, before the third or fourth day. As soon as the temperature rises above 102.5° Fahr.

or higher (104° Fahr.), the treatment by cold bath is to be commenced, and continued as long as the temperature remains so high. The effect and object of the bath is to lower the temperature—a lowering which does not reach its minimum immediately after the use of the bath. Hence the great caution required in its use. The diminution of bodily heat appears to be largely due to the excitement of skin transpiration—a condition brought about when the bath has a favorable influence. If the skin be moist and perspiring, the use of a cold water bath is not required.

“Among the many different way of applying cold water in fevers, Kuchenmeister gives the preference to Currie's *cold affusion*—the patient merely sitting in an empty tub, and having from four to six buckets of cold water (40° to 50° Fahr.) poured over him, from a height of about two feet. This form of administration is especially useful where cerebral symptoms are severe, with depression of the motor energy of the brain and cord, threatening paralysis of the heart, or severe degrees of bronchial complication with passive collection of large quantities of thick secretion in the tubes. In the unconsciousness of ‘sun-stroke’ it is thus useful. If the sitz or shallow bath be used, the patient must have his whole chest, front and back, well rubbed with towels till the skin becomes red, as he sits in the tub. It has been so used with benefit at an early period of *enteric fever* and *scarlet fever* (*The Practitioner*, July, 1869, p. 45.) The frequent and careful use of a thermometer for determining the temperature of the patient's body is required as affording the only correct measure of the severity of the fever. It is as necessary to the physician as the compass is to the mariner at sea.

“Sometimes the patient may be laid bodily in a bath of a temperature of about 95° Fahr., which is gradually cooled down to 86° Fahr. or 77° Fahr.: as patients get stronger the bath used colder and colder 77° or 86° Fhr. After the immersion, lasting from three to fifteen minutes or even an hour, and regulated by effects as indicated by the thermometer, the patient is dried at once and put to bed and covered as usual; and if the feet are cold, warm bottles, or a hot brick enveloped in flannel, may be applied. This method, now being carried out in some parts of Germany, does not recommend itself at first sight, but it may have advantages which we in this country have not yet learned to appreciate. The proper time for the use of the remedy must not be later than the first few days of the fever, and in scarlet fever when the skin is hot and the rash bright and red. The patient being stripped should have four or five gallons of very cold water poured over him (affusion); and when the heat of the surface returns, the application may be repeated and renewed again and again. Its good effect is to lower the temperature, to lessen the frequency of the pulse and the respiration, to render the tongue moist and soft, to diminish or remove stupor, to procure sleep, and sometimes it may bring about a perspiration which brings relief. But, if there be much nervous irritability, and especially in delicate females, the *shallow bath*, as less exciting than the *cold affusion*, is to be preferred. The

patient then sits or is supported in an open bath, about six feet long, in a depth of water from six to twelve inches, having a temperature of from 60° to 80° Fahr. The extremities and trunk must be well rubbed by the assistant, while water of the same temperature as the bath is gently poured over the head. The patient may remain in this shallow bath from five to forty minutes, till the temperature of the body is reduced. In cases of delirium with a high bodily temperature (104° Fahr.), and prolonged sleeplessness, while the patient is held in warm bath (92° to 98° Fahr.), ten, twenty, thirty, or more bucketfuls of cold water (40° to 60° Fahr.) are to be poured slowly over the head, hot water being constantly added to the immersion bath, so as to maintain its temperature at 92° to 68° Fahr. A refreshing sleep is sometimes the result.

“By using the *douche*, the cold water is made to impinge on some part of the body (head and shoulders, or individual joints, or any part in succession, for instance), with considerable force, and the nervous impression produced is correspondingly great—too great and uncontrollable to admit of its frequent employment in this way. Where *delirium* is furious it may sometimes be so quieted, and its good effects become visible if the pulse and breathing improve, or even continue as they were before commencing the *douche*. One good method of applying it is to place the patient in a warm bath, and then apply the cold *douche* to the head as described (Ringer).

“Great relief may also be obtained from the severe headache which is met with in acute specific fevers, if the water be employed as recommended by Prof. J. Hughes Bennett: ‘A wash-hand basin should be placed under the ear, and the head allowed to fall over the vessel, by bending the neck over the edge. Then, from a ewer, a stream of cold water should be poured gently over the forehead, and so directed that it may be collected in the basin. It should be continued as long as agreeable, and be repeated frequently. The hair, if long, should be allowed to fall into the cold water, and to draw up the water by capillary attraction.’

“Sucking of ice, also, is most grateful to fever patients; it allays thirst. Cold sponging, or by tepid water, of the body is also resorted to with great relief in fevers. Sponging with very hot water is similarly useful. It will sometimes bring about relief by perspiration; while at the same time it soothes the restlessness and favors sleep (Ringer).

“Bloodletting or hemorrhage also tends to reduce temperature; but bloodletting can never be tolerated in specific fevers, such as *typhus*, *typhoid*, *scarlatina*, and the like.

“*Infusion of digitalis* has been found by Wunderlich to have a wonderful influence in reducing and moderating the temperature in many febrile states, such as enteric fever. Its most obvious action in small doses is to depress the force of the heart. The dose should therefore be cautiously regulated; it must not be repeated too soon, nor be increased, if it should not operate at once.

“*Alcohol* is another agent, shown by the experiment of Professor C. Binz, Parkes, and Assistant-

Surgeon the late Count Wolowitz, capable of reducing temperature, but only in a very unimportant degree, so that its power as an antiphlogistic is very slight, and such enormous doses must be taken, that harm can only come by any attempt at reduction of temperature from the use of alcohol. Dr. Ringer has made many observations on this point, and is convinced that little can be hoped for from alcohol as a means of diminishing the preternatural heat of fever patients. This much seems certain, however, that its anti-febrile influence is best expressed in the removal of conditions which induce paralysis of the brain and heart, and when the temperature of the body is high, as indicated by the thermometer; in this respect it approaches quinine in its action, but at the same time possesses in addition its well-known stimulating action on the central nervous system and upon the heart. Depression is generally associated with a high temperature of the blood, and passes off when it falls. But, in giving alcohol, it must be remembered that two circumstances may contra-indicate its use, namely—(1). *Its effects on the pulse.* (2). *Its influence on the tone and diameter of the vessels.*

"It increases the heart's beats as well as the strength of the contractions of the heart. If such effects are to be feared, of course alcohol is not proper to be employed, either in fevers or inflammation. Certain precautions must therefore be observed in the administration of alcohol, and its effects on the different functions carefully watched, to learn whether we obtain from the employment of alcohol good or harm: and although the pulse and heart afford the greatest and most reliable information on this point, yet the influence of the alcohol on the other organs must not be overlooked, as it may happen that while one system is benefited, others are injured, and with some good, the alcohol on the whole may do much harm (Ringer).

"The following rules regarding the use of alcoholic stimulants in fever were laid down by Dr. Armstrong, and they have been indorsed by many experienced physicians.

"During the administration of alcohol—

"1. If the tongue becomes more dry and baked, alcoholic stimulants generally do harm. If it becomes moist, they do good.

"2. If the pulse becomes quicker, they do harm. If it becomes lower, they do good.

"3. If the skin becomes hot and parched, they do harm. If it becomes more comfortably moist, they do good.

"4. If the breathing becomes more hurried, they do harm. If it becomes more and more tranquil, they do good.

"In judging also of the influence of alcohol on the pulse," says Professor Ringer, "its compressibility is of more importance than its volume. Under the action of alcohol, a soft and yielding pulse of large volume often becomes much less compressible and smaller, changes which show an increase in the tonicity of the arteries and in the strength of the heart. Other circumstances also afford information as to the employment of alcohol, namely—'At the two extremes of age, the powers of the body are easily

depressed; and hence, with such persons, stimulants are early called for, and must be freely used. In such, and especially the aged, it is of the greatest importance to anticipate prostration by the early employment of alcohol, as when once this occurs, the greatest difficulty is experienced in restoring the patient to his former state. Young children, when weak, take stimulants even in large quantities with benefit. And with the stimulant some easily digested food should always be given.

"*Sulphurous acid* has also been proposed as an agent for the reduction of the temperature by Dr. R. Bird, in *Indian Medical Gazette* for February, 1869. In drachm doses every two, three, or four hours according to intensity of febrile heat, a fall of temperature has followed its administration, continued over twenty-four hours. In remittent fever he considers it especially beneficial and in 'internal fever'—a native name.

"(2.) *To insure sufficient but not excessive exertion, and to promote elimination in fever*, is much more difficult than to reduce temperature; which, for obvious reasons, is not always judicious to attempt either by cold water, bloodletting, digitalis, or alcohol.

"The system ought to be supplied with an abundance of alkaline salts, if the urinary excretions are not eliminated.

"*Chloride of sodium, the alkaline salts of soda, and of potash* tend to aid the formation of urea and its elimination. Purgatives generally, and especially *salines*—i.e., salts of the alkaline and earthy metals—tend to insure a proper excretion, probably by removing from the blood some of the abnormal products formed in fever, and great relief may follow their intelligent use. When urea is retained, they promote its elimination, because it is known that urea sometimes passes off by the mucous membrane of the intestines.

"Dr. Armstrong strongly recommended purgatives to be freely administered to fever patients during the first few days of their illness, and before exhaustion had set in, so as to produce several evacuations in the day. By free purgation in scarlet fever the severe sore throat and swelling of the glands can be prevented, as well as many other of the disagreeable *sequelæ* of this disease, such as discharge from the nose and ears. I have found the following formula of great benefit as a purgative for this purpose:—

"℞. *Magnesiæ sulphatis* 3vj; solve in aq. 5viij.; adde pulv. *guaiaci*, 3iss.; pulv. gum. *tragacanth.* co. gr. xi. *Misce bene.* One sixth part of this mixture given every four hours till the bowels are freely moved, gives great relief to the congested throat and swollen glands.

"But in some fevers, as in *typhus*, purgatives must be very cautiously and sparingly given, and always in mild doses. So also elimination by the skin, to the extent of *diaphoresis*, is to be dreaded in typhus fever; (see "Treatment of Typhus Fever).

"(3.) *Restorative agents.*—The most important indication, however, in the management of the febrile state is to find some substance which, being 'restora

tive in its action (Headland), will so act upon the blood and on the nervous system at the same time, as to restore the exhausted energies of the nervous centres.

"Food, mild stimulants, and quinine are all more or less employed, and quinine especially may be employed with benefit. Infusion of coffee as a medicine has been given by Dr. Parkes with the beneficial effects of relieving headache. Boeker and Lehmann have shown that the use of coffee, in health, delays the metamorphosis of tissue, and excites the nervous system. As a nerve-restorative, phosphorus merits some notice. And first, as iron is given where the blood requires nourishment and restoration, so phosphorus seems to nourish and restore the nervous system, especially in cases of fever, where much phosphoric acid has been passed by the urine. The forms in which it is given are (1) in pill, $\frac{1}{40}$ th or $\frac{1}{70}$ th of a grain of finely divided phosphorus, melted with fat, and the pill covered with an impermeable coating; (2) in the form of hypophosphites of potash, soda, or lime, given in camphor water, to the extent of five grains of the salt, three or four times a day. The potash salts seem to have a resolvent and liquefacient action so strongly marked, that great mischief may result from its incautious administration to persons affected with tubercular deposit in the lung. For the same reason it is of great value in chronic bronchitis, with thick fetid expectoration and congestion of lungs (Dr. Thorogood, in *Practitioner*, July, 1869, pp. 14-20). Camphor has been also found of use in the adynamic type of fevers. It acts beneficially in strengthening the pulse and reducing its frequency. At the same time it moistens the skin and subdues delirium, especially the low muttering form. Twenty grains or more every two or three hours are required for this result, and its effects must be watched (Graves). Counter-irritation by blisters has been largely employed by Graves and other physicians as a mere stimulant in fever, under the following conditions, described by Dr. Ringer as follows: "With acute diseases, such as the idiopathic fevers and inflammations, it not unfrequently happens that persons already weak and much prostrated have their dangers greatly aggravated by the following mental state—they become apathetic and unobservant, which condition increases till it even reaches partial insensibility or coma, and they can only with difficulty be roused, and then wear a stunned, stupid, and vacant look, and understand very imperfectly what is said to them. The body generally sympathizes with this depressed condition of the mind, and its functions are more and more languidly performed, till those necessary to life altogether cease. It is a condition which may not inaptly be compared to one produced by poisoning with opium, where there is partial coma, which produces a lethargy in the functions of the body whose activity grows less as the coma continues and deepens. But there is no true and refreshing sleep, while it is a condition in which sleep is most urgently needed. With patients in such a precarious state, it is of all things necessary to rouse them from their state of lethargy, and with the restoration of consciousness and activity of mind, there occurs renewed

vigor in the functions of the body, and the patient is removed from a state of imminent danger to one of comparative safety. To accomplish this, blisters of large size, in quick succession, and for a short time, should be applied to different parts of the body, for instance, to the chest, to the abdomen, and to the thighs and calves. I have seen very satisfactory results follow their application to the nape of the neck under such circumstances. Dr. Ringer considers that more good is obtained by an opiate and plenty of stimulants, carefully given to produce sleep, out of which the patient wakes strengthened and much improved. No fixed rule can be laid down; each case must stand on its merits.

"The treatment of any special febrile state depends on the disease of which it forms a part, and by which it is more or less modified—forming a special topic for consideration in the part which treats of special diseases. But it is above all necessary to guard against the habit of trying always to be doing something. As a routine system, nothing can be laid down as a rule, either in the direction of depletion, or of evacuants, or of stimulation or restoration. The febrile state is in many diseases part of the essence of the morbid condition, which cannot be cut short nor materially subdued by remedies. There is no specific remedy for the cure of any fever; and in the present state of our knowledge regarding specific febrile diseases, there can be no specific remedy for their cure.

"Every disease where fever is present, and every case of specific febrile disease, must be studied so that its management or treatment may be regulated on the merits of the individual case; and must be regulated by the state of each particular function as determined by clinical investigation daily.

"No remedial agent here mentioned can cut short a specific fever. Judiciously employed, they may render them less dangerous, and may in some cases save life."

MURIATE OF AMMONIA IN BRONCHITIS, CATARRHAL PNEUMONIA, Etc.

In obstinate acute bronchitis, after the first intense stage; in catarrhal pneumonia, both of children and adults; in bronchorrhœa, and also in ordinary chronic bronchitis, Dr. Wood has obtained more apparent good from the use of muriate of ammonia than any other remedy. The best formula for giving the muriate with which he is acquainted is as follows: \mathcal{R} Ammonia muriat. \mathfrak{z} ij; ext. glycyrrhiz. \mathfrak{z} j; mucil. acaciae, aquae, aa $\mathfrak{f}\mathfrak{z}$ iij. M. S. Tablespoonful for an adult every two hours; teaspoonful for a child a year old every three hours.

When patients object to the mixture of sweet and salt, the following is to be preferred: \mathcal{R} Ammonia muriat. \mathfrak{z} ij; aquae, $\mathfrak{f}\mathfrak{z}$ vj. Dose as before.

When the cough is very annoying $\frac{1}{2}$ of a grain of sulphate of morphia, or 10 to 15 minims of tincture of hyoscyamus, may be added to each dose.

In bronchorrhœa the following may at the same time be used by inhalation twice or thrice daily. Take of Sat. solution of alum, \mathfrak{z} vj; tr. hyoscyamus, \mathfrak{z} ss. M.

TREATMENT OF PLEURISY.

By FRANCIS E. ANSTIE, M.D., F.R.C.P.

*(A System of Medicine, vol. iii., 1871, 8vo. pp. 968.)
Treatment of Pleurisy.*

"The treatment of pleurisy." Dr. Anstie writes, is naturally divided into that of the primary and that of the secondary forms.

"Primary pleurisy, of a well-marked type, is perhaps as little the fit subject of treatment by drugs or other artificial means, in its acute stages, as any disease that could be named; or rather, the drugs needed are very few, and are all of the stimulant-narcotic class. For the vast majority of patients, indeed, the only drug which is of considerable value is opium in one or other form, until the febrile period is passed over, when preparations of iron sometimes become very useful. I do not make this statement without having carefully watched and considered the effects of a number of internal remedies which are still used as a matter of course, and, indeed, considered essential by various physicians of good repute.

"To take, first, the case of primary simple fibrinogenic pleurisy, one may at once decide against all heroic remedies, since evidence abounds on all sides to show that the disease is a perfectly harmless one, unless the patient has strong tendencies to constitutional disease, and that it tends always to recovery. In fact one has no need to adopt any treatment whatever beyond keeping the patient in one room, free from draughts, and in the posture which he finds easiest to him; feeding him steadily with nutritious food of the kind best adapted to the degree of fever and digestive derangement that may happen to be present; forbidding unnecessary movements and talking; applying hot poultices to the side, and administering an occasional hypodermic injection of $\frac{1}{8}$ or $\frac{1}{4}$ grain morphia to keep the pain in check. Acetate of ammonia, in doses just short of those which produce decided sweating, will sometimes greatly relieve the pain and distress even without the aid of opium, and is at all times a harmless, even if an unnecessary medicament. Recently, the acetate of methylamine, a base which exists in roasted coffee, owing to the transformation by heat of a part of the caffeine) has been proposed, and apparently used with good effect, by Professor Béhier, of Paris. There is usually no necessity for alcohol, and it had better be avoided. After some six or seven days in bed the patient will probably be well able to sit up; and the only thing necessary to forbid him is *movement*. He should sit perfectly still. If any anæmia remains, the tincture of muriate of iron in twenty-minim doses, thrice daily, is advisable as a tonic; and, on the whole, a very few days ought to see the patient completely fit to resume his ordinary work.

"In pleurisy evidently of considerable extent, and with a notable amount of *serous effusion*, the ideal of treatment should be still, as much as may be, that given above. It is now very decidedly proved that the old heroic methods of attacking severe pleurisy ought to be abandoned. In the first place, as to general bloodletting. I have witnessed enough of this treat-

ment to be sure of two things: firstly, that the older physicians were perfectly right in the statement that it usually relieved *pain* with great promptitude; and secondly, that the relief thus given is not in the least degree superior to that afforded by hypodermic injection of morphia, except that it operates more quickly, perhaps by some five minutes, than the latter. As to bleeding checking the tendency to effusion, *that* is to me quite incredible. No such effect has been witnessed in either of the five cases of phlebotomy for acute pleurisy that I have watched at various times; and I observe that Dr. Aitken, while still adhering to the use of this remedy, recommends us not to be discouraged by the fact that the effusion may go on increasing after the bleeding, and the patient also may feel very depressed. It is true, he says, that after a certain time absorption will set in, and that it will then go on more rapidly and well than if the patient had not been bled. I cannot at all imagine on what evidence this last opinion is based; certainly it utterly conflicts with the facts of my own experience; and though I have personally seen little of the actual treatment of pleurisy by bleeding, I have examined a pretty large number of persons whose past history included one or more pleuritic attacks which had been so treated. The accounts given by such persons show a melancholy uniformity: long weeks and months of suffering from the presence of effusion in the chest, occasionally leading (through empyema) directly into active and rapidly fatal tuberculosis, nearly always slow and imperfect recovery, with diminished vital energy and especial weakness of the chest, and only in the rarest cases a tolerably prompt and complete recovery. The homœopathists have made their fortunes in no small degree by their treatment, of pleurisy, which has had the one sole merit of being purely negative, and avoiding all destructive agencies.

"A much better case, no doubt, might be made out on behalf of local bloodletting. Cupping ought never to be mentioned, being actually barbarous in the suffering it inflicts on a pleuritic patient. But leeches unquestionably do relieve pain very often in a speedy and effectual manner, and I only know of one objection to their use—viz., that morphia will relieve the pain with even greater certainty. During five years of dispensary practice I determinedly abstained from the use of leeches in pleurisy, and found morphia, even given by the mouth, a perfectly satisfactory substitute. But since the use of the hypodermic syringe has become more common, the advantages of morphia are far more manifest; and I have no doubt, personally, that leeches are now unnecessary. The first act of the physician in treating a pleuritic patient in the agony of the early acute stage should be to inject 1-6 or 1-4 grain of acetate of morphia (for an adult) under the skin, and to envelop the painful side in a hot poultice. For a child under two years, 1-40 or 1-30 grain is enough. Such doses as these may be repeated every four hours if necessary; but in fact it is seldom that more than two or three doses are needed in the first twenty-four hours, and afterwards one dose in each twenty-four hours is generally enough.

"I would insist strongly on the advantages, indirect as well as direct, of subcutaneous over gastric administration of opiates; in a direct way, the former is superior, as acting much more rapidly; in an indirect way, because it so much less disturbs the functions of the alimentary canal.

"Of the treatment by mercury, I can express only the most unqualified disapproval. I have watched many cases of pleurisy in which, according to the rule formerly acknowledged, mercury was given, either to complete or partial salivation, as soon as the signs of effusion became unequivocal, and I can truly say that these cases, even when they were not further complicated by the depressing influence of bloodletting, contrasted very unfavorably with the results of a treatment which entirely adjures mercury for any purpose except that of an occasional purgative. I am glad to cite, on this point, the late Dr. Hillier, who says (in his *Monograph on Children's Diseases*) that from experience he had been led to abandon mercurial treatment for pleurisy; and I believe that, whatever some of the class-books may still say, mercury is practically given up by the best physicians in this country, not only in children's pleurisy, but in that of adults. It seems the general opinion among those with whom I have conversed, that the absorptive action with which mercury used to be universally credited is more than doubtful in the case of pleuritic effusions, whether fibrinous or serous. And certainly if it fails to do good, mercury may do very sensible harm. I have seen cases in which it apparently produced the most decided anæmia—at least there was scarcely any other possible cause for the latter condition—which set in rapidly after the first occurrence of pytalism.

"The treatment by so-called 'counter-irritants,' as pursued by many physicians, is no less repugnant to me than is that by mercury or bleeding. Let me make two admissions. In the first place, the mere application of a mild mustard plaster, or, still better, of a hot poultice, or epithem, undoubtedly may give some ease; perhaps even arrest incipient inflammation; and the use of small flying blisters, in the limited attacks of pleurisy which are so common in phthisis, undoubtedly appears to give relief in many cases. But the use of large blisters, especially if kept open, appears to me both useless and often prejudicial. I shall not repeat here what I have said at length elsewhere; suffice it to say that I adhere to my opinion, already stated, which is the same as that previously announced by many of the greatest masters of practical medicine in the present century.

"The practise of painting the chest-wall with iodine, though not open to the same positive objections as apply to blistering, has never, in my experience, yielded any very positive results. It is I believe very inferior in utility to the application of the simple adhesive, or Burgundy pitch, plaster, to afford mechanical support; this really does sometimes appear to favor absorption of the fluid, and it usually gives much comfort.

"The employment of diuretics to promote absorption is another point on which I find myself at issue with the opinions of many. The only drug which

has appeared to me, in some cases, directly to promote absorption by means of increased diuresis, is iodide of potassium, in quantities amounting from 6 to 18 grains daily, according to the age of the patient. I think it is worth trial for two or three days (along with the external use of iodine) when effusion comes to a standstill.

"The medicine, however, which stands quite alone in its power to promote the process of absorption is *iron*—best given in the form of *muriated tincture*; and in all cases where there is marked anæmia it should be exclusively employed from the moment when the necessity for administering opium ceases."

After adverting to some matters of minor importance, Dr. Anstie alludes to the change of opinion which the writings of Trousseau, Bowditch, and others have produced during the past few years. With regard to paracentesis thoracis Dr. Anstie says:—

"It can hardly be doubted that the whole feeling about the dangerousness of paracentesis rested upon the use of clumsy and imperfect means of operation, and on exaggerated ideas of the evil effects of admitting a small quantity of air into the pleural sac. With regard to the first point, we are entitled to say that it is quite possible so to operate as to insure that no damage will be done to viscera, and that no more than a trifling quantity of air will be admitted to the pleura. And upon the second point we may certainly now assure ourselves that there is no reason to fear serious mischief from the admission of a limited quantity of air if the opening made in the operation be afterwards properly closed. It is even unnecessary, as Dr. Bowditch's large experience has shown, to make the opening valvular. But the most important advance that has been made is the invention of apparatus which allows of the operation being made either simply exploratory, or carried on at once to evacuation of the fluid. With the instrument either of Bowditch or Dieulafoy we introduce a very small trocar and canula guarded with a tap, and by attaching a suction-syringe and opening the tap, we withdraw a small amount of fluid, the exact nature of which we can identify: if we elect to continue the evacuation, we can do so with the aid of the syringe; if, on the other hand, no fluid can be obtained, the guard tap has prevented the entrance of air, and we can withdraw the canula and close the wound without having done the least mischief. By the use of the small canula we are able to operate without risk, because, in the case of an entirely mistaken diagnosis, we should have done no damage, even though we had perforated a consolidated lung, a solid tumor, or an intercostal artery. The suction power of the vacuum-syringe will enable even thick fluid, such as somewhat concentrated pus, to be withdrawn through the smaller-sized canulæ; but the puncture is such a trifle that in case of our desiring a larger tube, the smaller one can be withdrawn, the finger being pressed on the spot as it emerges, and the more capacious canula introduced at the same place.

"The site of puncture should be selected in ordinary cases according to Bowditch's rules: Find

the inferior limit of the sound lung behind, and tap two inches higher than this on the pleuritic side, at a point in a line let fall perpendicularly from the angle of the scapula. Push in the intercostal space here with the point of the finger and plunge the trocar quickly in at the depressed part; be sure to puncture rapidly and to a sufficient depth, or you may be balked by the false membranes occluding the canula.

"It will sometimes happen that with the greatest care and trouble we are unable to get a flow of fluid at the point where we first puncture; it is then our duty to try elsewhere, for our failure may be owing to unusual thickness of the false membranes in the lowest inch or two of the pleural cavity. We thereupon repeat the puncture a little higher up, and further towards the axillary line, and here we perhaps find fluid; at any rate, no harm has been done by the two punctures.

"The circumstances under which paracentesis ought to be performed for pleurisy are the following:

"1. In all cases of pleurisy, at whatever date, where the fluid is so copious as to fill one pleura, and begins to compress the lung of the other side; for in all such cases there is the possibility of sudden and fatal orthopnoea.

"2. In all cases of double pleurisy when the total fluid may be said to occupy a space equal to half the united dimensions of the two pleural cavities.

"3. In all cases where, the effusion being large, there have been one or more *fits* of orthopnoea.

"4. In all cases where the contained fluid can be suspected to be pus, and exploratory puncture must be made; if purulent, the fluid must be let out.

"5. In all cases where a pleuritic effusion, occupying as much as half of one pleural cavity, has existed so long as one month, and shows no sign of progressive absorption.

"The *limits* of the operation form an important question. Formerly one great error seems to have been, that operators were often too anxious to extract the whole of the fluid; in this way they often protracted the operation to a mischievous extent, and gave abundant opportunity for that very entrance of air to the pleura which was theoretically so much to be dreaded. Among the latest writers, Bowditch and Murchison have most authoritatively shown that it is neither necessary nor useful to extract the whole of the fluid, and that the removal of just so much as may be necessary to relieve substantially the mechanical distress, will in most cases give the necessary spur to the natural process of absorption, by means of which the rest of the fluid will be taken up. One rule seems absolute; the withdrawal of fluid must be arrested the moment that the patient begins to complain of constricting pain in the chest or epigastrium. Even in the case of purulent effusion there can be little doubt that absorption often takes place, though unquestionably there is here a danger that concrete cheesy matter may be left unabsorbed, and under unfavorable circumstances may become the starting-point of tubercular infection.

* * * * *

"It remains to say a few words on the treatment

of those least fortunate cases where, from one cause or another, a purulent fluid forms and re-forms with great rapidity after each tapping, and perhaps becomes putrid and stinking. Where it is only a question of excessive purulent secretion, simple washing out of the pleura with warm water after tapping may possibly change the action of the membrane, but in most cases it will be necessary to keep the canula in, cork it up, and daily allow the exit of pus, and then wash out the cavity. But in my opinion, if it comes to this, the better plan by far is the drainage-tube. A needle-eyed probe, being introduced through the original opening, is carried through to the opposite chest-walls, and is there made to protrude the muscle and skin of an intercostal space, the finger outside carefully feeling for it. The probe is cut down forced out through the chest-wall, and threaded with a strong thread; this is then drawn back through the chest till it comes out at the original opening. The thread is fastened to an India-rubber drainage-tube (pierced with openings in the manner devised by Chassaignac), and the latter is then drawn through the chest till it issues through both orifices. Nothing more then remains but to tie the ends of the tube lightly together."

ON THE INHALATION OF CHLOROFORM IN PARTURITION.

The following is Sir James Simpson's summary of the rules for the exhibition of chloroform in parturition:—

"1. Begin the inhalation of chloroform when the patient complains of much pain. This is generally towards the end of the first stage.

"2. Always inculcate perfect quietness around the patient, particularly when commencing to give the chloroform.

"3. Only give it during the pains, and withdraw it during the intervals.

"*Exceptions.*—Give a whiff of the chloroform also during the intervals when the pains are very severe, and the patient awakes complaining of them. Give small doses, or only repeat them every second or third pain, when the chloroform affects the action of the heart or uterus. These cases are very rare.

"4. When given during the first stage the anaesthesia need not be deep, unless the suffering be great or the symptoms of anaesthesia disagreeable.

"5. As the second stage progresses make the anaesthesia so complete as to destroy all sensibility.

"6. Do not allow the urinary bladder to become over-distended.

"7. Do not restrain the patient in one position.

"8. Be sure to remove the chloroform as soon as the child is born.

"9. Do not awake the patient artificially."

ON THE TREATMENT OF HEAD INJURIES.

Having carefully considered the whole subject of concussion and injuries of the brain, including compression and extravasation of blood with or without fracture of the skull—Mr. Bryant writes in his

excellent manual, just published — may be fairly deduced :—

General conclusions.—1. Injuries of the head are of importance only so far as they involve the cranial contents—a simple uncomplicated case of fracture of the skull being of less danger than a general concussion of the brain.

2. A slight concussion of the brain, associated or not with a fracture of the vault or the base of the skull, which manifests itself by a slight or passing suspension of the cerebral functions, generally does well.

3. A severe concussion or shaking of the brain, associated or not with a fracture of the vault or the base of the skull, is liable to produce contusion or laceration of the brain substance, either upon its surface or within its ventricles, with more or less extravasation of blood, and when the vessels are diseased, a copious hemorrhage often follows a slight injury.

4. In cases of concussion of the brain, the cerebral structure is at least as much injured by *contre-coup* as at the seat of injury, the base of the brain suffering the most. Fracture by *contre-coup* does not take place.

5. A fall upon the vertex from a height, or a blow upon the head from a blunt instrument, may be followed by fracture of the skull, or not; such an accident produces, as a rule, a general concussion of the brain, with such complications as contusion or laceration of the brain, and effusion of blood either upon its surface or within the ventricles.

6. Falls upon a pointed object, and blows with a sharp instrument, as a rule, are followed by a local fracture; and if the brain be injured, it is at the seat of injury. As a consequence, the symptoms may be accounted for by local causes only, and the surgical treatment directed by local considerations.

7. When symptoms of compression of the brain immediately follow an injury to the skull produced by a fall from a height, or a blow from a heavy and blunt instrument, the cerebral injury will be general, the brain contused and lacerated, particularly at the base by *contre-coup*, and if extravasated blood be found external to the dura mater, blood will also be found upon the surface of the brain, or within its membranes.

8. If symptoms of compression of the brain follow a local injury produced by a fall upon a sharp object, or a quick blow from a pointed one, such symptoms, as a rule, are produced by local causes, such as depressed bone, or extravasation of blood from rupture of the middle meningeal artery.

9. Such local injuries, when they give rise to marked or persistent symptoms, should be treated by elevation of the depressed bone: but if no general symptoms are present, unless the bone be comminuted and can be easily removed, no operation is indicated; a local pressure of the brain by bone, although severe, uncomplicated with symptoms, generally doing well.

10. When compression of the brain follows a local injury over the course of the meningeal artery

after an interval of time, and when reaction has been established, although no depressed bone be present, the operation of trephining may be performed with a chance of success, the blood often, however, passing downwards towards the base, where the operator cannot relieve.

11. When compression of the brain follows, as a secondary result, a general injury—although that compression is evidently produced by extravasation of blood—the operation of trephining is useless, if not injurious; for although blood may be effused from rupture of a meningeal artery, there will certainly be found some contusion or laceration of the brain itself, or extravasation beneath its membranes, which the operation cannot relieve.

12. Encephalic inflammation may follow any concussion or injury to the brain, however slight, whether complicated with fracture or not; and the danger of such a result is in proportion to the encephalic injury. In cases of contusion or laceration of the brain, with extravasation of blood, it is almost sure to follow, and, as a rule, it will produce a fatal termination. This inflammation may appear within a few hours of the accident, or it may be postponed for some days; it may be very rapid in its course, or very insidious in its nature. If the brain itself is the seat of the disease, it is generally insidious, giving rise to either a diffused or local abscess; but if the membranes are involved, effusion, convulsions, coma and death will rapidly take place.

13. The operation of trephining is perfectly useless in cases of severe concussion of the brain, whether, associated or not with fracture, although it may relieve compression arising from local conditions; for the brain is generally injured by *contre-coup* at its base or in positions where no operation can be of benefit, but must prove injurious.

14. The operation of trephining is only of value in local injuries to the skull, when associated with symptoms of compression from depression of bone, or the local extravasation of blood between the bone and the dura mater.

15. Fracture of the base of the skull may take place alone, and be marked by only special symptoms; they may be associated with, and are generally found in, all cases of severe fracture of the vault, when produced by a heavy fall or blow, the fissures radiating downwards in a direction parallel to the forces employed.

16. Fractures of the base may be complicated with encephalic injuries similar to fractures of the vault, and may consequently be manifested by general symptoms as well as special ones; in severe cases the former completely masking the latter. The injury, however, may generally be diagnosed, the mode of its occurrence indicating the probability of its nature.

17. All injuries to the head should be treated with extreme care, and regarded as serious. Rest in the horizontal posture, freedom from excitement, bland, nutritious, unstimulating food are essentials, under all circumstances, the great principle of practice being to ward off excess of reaction or inflammation of the cranial contents.

OXIDE OF ZINC OINTMENT.

J. Kalish, in the *Am. Journal of Pharmacy*, suggests the following method of manipulation for preparing a smooth ointment of oxide of zinc: Rub the oxide in a wedgewood or unglazed porcelain mortar with considerable pressure, until as finely divided as possible; now add, gradually, with constant trituration and pressure sufficient sweet oil of almonds to form a smooth paste; then add a little lard, mix thoroughly, and finally, add the remainder of the lard. The same process will answer for all ointments containing insoluble substances.

SUCCESSFUL EMPLOYMENT OF PROPYLAMIN IN ACUTE ARTICULAR RHEUMATISM.

M. Dujardin-Baumetz, in a recent communication to the Société Médical des Hôpitaux of Paris, related the results of his trials of propylamin in acute and subacute articular rheumatism. They had been very successful; the pain had first diminished, then the movements became easier, and the swellings in the joints disappeared rapidly. The duration of the attack seemed generally to be greatly shortened, and, on an average, the disease was stopped in about eight days. Dr. Dujardin-Baumetz generally uses the following formula: Propylamin, ten to thirty grains; tilleul water (infusion of linden-tree leaves), three ounces; syrup of morphia, five drachms; essence of aniseed, sufficient quantity.

USE OF PERCHLORIDE OF IRON IN VARIOLA.

During the recent epidemic of variola at Gleiswitz, Dr. Silbergleit derived the very best effects from the employment of a solution of perchloride of iron. Twenty to thirty drops of the solution in an ounce of glycerine, given several times successively, at an hour's interval, produced considerable amendment in variolic angina; the pustules were speedily transformed into dry crusts, and the swelling and hyperæmia of the mucous membrane soon diminished. The medicament acted both as an astringent through the medium of the blood, and locally through the glycerine.—*All. Wiener Med. Zeitung*.

LARGE DOSES OF BELLADONNA IN WHOOPING-COUGH.

A paper in the *Practitioner* for March, by Dr. Charles Kelly, gives particulars of a rather bold experiment in the treatment of whooping-cough by large doses of belladonna. In the first case, a child, aged five years, took more than thirteen drachms of the tincture in four days and a half, thus: "July 30th: At 6 a.m., and again at 10 a.m., he had thirty minims of tincture of belladonna. At 11.30 a.m. the tongue was rather dry and glazed at the centre, but the pupils were natural, and there was no flush or feverishness; fifteen minims of the tincture were then given every four hours. The next day the same quantity was given every two hours, but without producing any apparent effect." On Aug. 2nd, he was rather restless during the afternoon; at 3 p.m. ten minims were given every hour. On Aug. 3d, the face was slightly flushed; the cough was so much relieved that at 8 p.m. the

medicine was discontinued. After taking the tincture for four days and a half the whoop nearly ceased. He coughed slightly after this date, but whooped only four times the following week, and was then quite cured. The second child, much thinned by previous illness, was two years and eight months old; and had fifteen drachms of the tincture of belladonna in four days, with no more result than a blush over the skin for a short time and dilated pupils. The whoops diminished a little in frequency and considerably in severity. After a few days' interval sixteen drachms were again given in four days, and a rapid recovery took place. The third case, a boy six and a half years old, was more affected than the others. Rather more than eleven drachms were given in four days, and, after a short interval, fifteen drachms were given in five days. The whoops were rather more frequent while taking the medicine than after its discontinuance.

The chief interest of this somewhat startling experiment is in the doses of belladonna borne without serious toxicological results. We are disposed to question the genuineness or quality of the tincture. The remedy was tried in a great number of cases, with benefit in some, but with quite negative results in other cases. We congratulate Dr. Kelly on the merely negative results. We have to thank him for a remarkable experiment in therapeutics, though there is little in its results to encourage an imitation of the practice. Children were known to be tolerant of belladonna, but Dr. Kelly's cases give an illustration of the fact that will surprise the profession.—*Lancet*.

ORCHITIS TREATED WITH ABSOLUTE REST.—Dr. Brambilla, of Lodi, Italy, publishes, in the *Lombard Medical Gazette*, an account of twenty-two cases of orchitis treated by this means; twelve of these were gonorrhœal, six traumatic, and four idiopathic. In all the cure was complete. Medium time of treatment was five days, "although on admission the affection had lasted from two to six days, and the testis had acquired from two to five times its normal size. By absolute rest is meant that the patient should lie continuously on his back, with a small cushion between the thighs, in order to support the testis, and that he must never get off the bed even for the purpose of attention to his natural wants." The Doctor thinks orchitis can be more rapidly and more effectually cured in this way than by any other ordinary means.—*Chicago Medical Journal*.

COLOTOMY FOR INTESTINAL OBSTRUCTION.—(*Medical Times and Gazette*).—Mr. Steele commences by observing that many cases of intestinal obstruction terminate fatally without surgical interference, which, were timely operative measures adopted, would very probably end in recovery. He relates the case of a man, aged fifty-two, who, usually enjoying good health, had lately suffered from diarrhœa. On June 2d he was unable to relieve his bowels; he took castor oil, but without effect. Mr. Steele saw him early next day, and found tympanites, colicky pains, and fecal accumulation in the rectum,

with strong desire for defecation. Various aperients and enemata were unavailing; the rectum was cleared out and galvanism applied, but without result. Bad symptoms soon set in, succeeded by failing power of the heart. This was relieved by ether and laudanum. Liquid food was well taken and retained. On the sixth day, the patient, who had somewhat rallied, suddenly becoming worse, colotomy was performed. Flatus immediately escaped, and faeces some few hours afterwards. Localized peritonitis, inflammation of the skin, diarrhoea, gastric and intestinal irritation, etc., gave great anxiety for about four weeks. By this time the wound was well healed around the intestine, and the patient improved, and became restored to fair health; but remained weak. No passage per rectum has occurred since; but free discharges of thick mucus had proved troublesome. A swelling high up the pelvis, which, before operation, seemed like faeces accumulated in the intestinal coils, afterwards descended, and proved to be a tumor, and the cause of obstruction. The patient was doing well. Mr. Steele concludes with observing that where the cause of obstruction is obscure, and appears to be faecal accumulation, all legitimate endeavors should be made to dislodge the same; that when the cause of obstruction is purely mechanical, opiate treatment should be immediately commenced, and operative interference promptly adopted; that in such a case as the one narrated, surgical aid is the only means of saving life; that a person with a tumor compressing the lower bowel is in a much better condition with an artificial anus than with a constantly forced passage by the natural orifice; that the growth of the tumor will not be nearly so rapid as if it were subject to compression by the faeces and strained defecation, and that operation is most likely to be successful when the obstruction is caused by tumor, there not being sloughing to fear, as in internal hernia or intussusception.—*Medical Times*.

TREATMENT OF CHILBLAINS.

F. RHIEN recommends an aqueous solution of iodine and tannin as a remedy for chilblains. He says that the result exceeded his expectations—five applications of the remedy being successful. The application has also been tried by others, with good results when properly applied. The solution is made as follows: About an ounce of tannin is dissolved in half a pint of water; seventy-four grains of iodine are dissolved in an ounce and three-fourths of spirit of wine; the two solutions are then mixed, and enough water is added to make up the whole to two and a half pints. The remedy is applied once daily, the best time being before going to bed. The mixture is gently warmed over a very slow fire; the affected part (*e. g.*, the hand) is dipped in it while still cold, and held there until the liquid, on being stirred, feels uncomfortably hot. The vessel is then removed from the fire, and the hand is dried over it, without gloves. The vessel used must be of earthenware or porcelain, not of metal. Care should be taken not to use too great a quantity of iodine, especially when

abrasions are present. According to Rhien, four or five applications are sufficient.—*Brit. Med. Journ.*, Feb. 8, 1873.

W. T. CARTER, M.D. Louisville, Ky. (*Am. Practitioner*, Oct. 1872), recommends the following solution for the destruction of parasites: Corrosive sublimate, gr. xij.; alcohol $\frac{5}{8}$ iv.; Oil of Bergamot, Mvj. Mix and add water $\frac{5}{8}$ iijss. This mixture should be thoroughly applied to every part of the body infested. The first application will, in the majority of cases, cause the death of every accessible louse; but it should be continued twice daily for at least one week, in order that none may escape. In that peculiar condition of the system, described so well by Dr. McCall Anderson, in which lice multiply on the body in such numbers and with such astonishing rapidity, the iodide of potassium alone, or in combination with prussic acid, given internally, has yielded the most satisfactory results.

MCINTOSH ON DYSMENORRHOEA AND ITS TREATMENT WITH SULPHATE OF QUINIA AND EXTRACT OF STRAMONIUM SEEDS.—The results of an experience with each of these drugs, used separately, led Dr. McIntosh (*American Quarterly Journal of Medical Science*, Jan., 1873) to unite them in the following proportions, varied according to the requirements of each individual case. 'Give a pill consisting of $\frac{1}{4}$ to $\frac{1}{2}$ gr. ext. daturæ stramon. sem.; $\frac{1}{2}$ to 3 grs. sulph. quiniæ; $\frac{1}{4}$ to $\frac{1}{2}$ gr. opii; 1 to 2 grs. camphor, three times a day for five days; beginning three days before the catamenial discharge, and continuing for two days after its inception. The same treatment is to be commenced just previously to the next monthly period, and usually from four to eight repetitions, where there is no mechanical obstruction, will secure a regular, painless monthly flow.' Latterly Dr. McIntosh has added powdered ipecacuanha to the above pill, and, as he states, 'with benefit.' With the foregoing treatment should always be combined such emmenagogue and ferruginous medicines as an anæmic or other condition may require, while special directions should be given to procure a daily action of the bowels. A careful avoidance must be observed of exposure to cold or wet, and great care in keeping the feet warm, and a good circulation in the lower extremities generally.'

ARSENIC IN DYSPEPSIA.

Dr. J. C. Thorowgood, in the *Practitioner*, speaks highly of the action of arsenic in many diseases of the stomach. He has found that one-drop doses of Fowler's solution in half an ounce of infusion of colombo had the effect, in a case he treated, of allaying the pain, stopping the vomiting of food, and enabling the patient to eat and digest small quantities of mutton. He states that the usual irritable tongue, with projecting papillæ and yellow or gray fur, indicate arsenic. The more purely local the gastric symptoms, the better is the chance of arsenic doing good. Where there is much general exhaustion of the system, with disordered urine or hepatic congestion, it does not promise much.—*The Georgia Medical Companion*.

That clerical and lay functions were once conjoined, the following old-time advertisement will sufficiently show: "Wanted, for a family who have had bad health, a sober, steady person in the capacity of doctor, surgeon, apothecary and man-midwife. He must occasionally act as butler, and dress hair and wigs. He will be required sometimes to read prayers, and to preach a sermon every Sunday. A good salary will be given."—*Medical Times*.

SENNA-COFFEE.

It may not be generally known that the disagreeable taste of infusion of senna may be completely removed by the addition of coffee in its preparation.

For a full dose, take a teacupful (say 1 oz.) of senna leaves, a heaped teaspoonful (say 2 drachms) of freshly parched and ground coffee, and boiling water a sufficient quantity to make a teacupful (say four fluid ounces) of infusion—steep till of sufficient strength.

To the infusion prepared, add milk and sugar to taste. The drink will be quite acceptable to adults, and not disagreeable to children.

APPLICATION FOR CHILBLAINS.

Two parts oxide zinc; one part tannic acid; ten parts glycerine; eight parts balsam Peru; four parts camphor; to be applied night and morning.—(*Union Med.*, Oct. 15.)

POMADE IN LOSS OF HAIR.

M. Bouchut recommends the following, to be rubbed in night and morning, when the hair falls off after delivery or serious illness, giving at the same time, internally, iron and quinine, and in some cases the arseniate of soda: Ten parts extract henbane; five parts tincture of iodine; thirty parts beef marrow; scenting with bergamot.—(*ib.*)

OINTMENT FOR PILES.

M. F. Guym, of the Necker Hospital, Paris, prescribes, in painful hæmorrhoids, an ointment compounded of one part extract belladonna, two parts extract rhatany, and fifteen parts lard.—(*The Doctor*.)

NIGHT SWEATS.

Sidney Ringer announces that belladonna has a decided effect in checking anomalous cases of habitual sweating; and a number of other observers have found atropia, in 1-60 grain doses two or three times a day, to exercise some control over the profuse sweats of advanced phthisis, when other remedies had failed.

ATROPIA IN NIGHT SWEATS.

Dr. J. C. Wilson, in the *Philadelphia Medical Times*, calls attention to the efficacy of atropia in arresting the night sweats of phthisis, in doses of one-sixtieth of a grain once or twice a day. It was promptly successful after the failure of sulphuric

acid, tannic acid, oxyd of zinc, and other remedies. Dr. Sidney Ringer also furnishes similar testimony in the *Practitioner*, he having injected it in the skin in doses of the hundredth part of a grain. Dryness of the fauces and dilatation of the pupils result from a continuance of the treatment.

ON A MEANS OF INTENSIFYING CARDIAC MURMURS.

At a meeting of the Clinical Society of London, held on December 13, Dr. Vivian Poore explained a simple means of intensifying cardiac murmurs, which is likely to prove useful at the schools as an aid to clinical teaching. He illustrated the scheme by making his patient lie down upon a common mahogany table, placing a walking-stick vertically on the centre of his chest about the level of the third costal cartilage, and balancing upon the top of the stick the sounding board of a guitar with the orifice downwards. His patient was the subject of an aortic diastolic bruit, and the arrangements made caused the murmurs to be distinctly audible to the members standing around at a distance of several feet from the patient.

TESTING OF URINE FOR BILIARY ACIDS.

M. Straburg (*Repertoire de Pharmacie*) uses the following method, which seems elegant, safe, and easy: 1. a bit of sugar is dissolved in the urine. 2. A bit of filtering paper is dipped in the urine and dried. 3. When the paper is dry, one or two drops of sulphuric acid are put upon the paper. If the urine contains biliary acids, the paper assumes a bright violet color on being examined with a strong light.—*The Lancet*.

TINCTURE OF CHLORIDE OF IRON FOR CORNS.

Dr. C. Barber states (*Lyon Médicale*) that he has cured three cases of corns on the toes by the application of a drop of the tincture of chloride of iron applied on the corns night and morning. This application was continued for fifteen days in one case, when the corns from which the patient had suffered for thirty or forty years were entirely destroyed, and pressure on the part gave not the least uneasiness.

INSTANT ARREST OF EPISTAXIS.

Dr. Marin, of Geneva, states, in the *Jour. de Med. et de Chirurg. Practique*, May, 1872, that, as the bleeding in epistaxis generally flows from only one nostril, and most frequently from the anterior third of one of the nasal fossæ, he was led to believe, that by compressing the corresponding facial artery on the superior maxillary bone, near the ala of the nose, the afflux of blood would be diminished, and the hemorrhage at once be arrested. He has tried this plan in very many serious hemorrhages from the nose, and the expedient has proved perfectly and promptly successful.—(*L'Union Médicale*, 25th May, 1872.)

CHLORIDE OF POTASSIUM IN EPILEPSY.

Dr. Lander advocates this salt as better than bromide of potassium in epilepsy. He finds it is more active, costs five-sixths less, and has not the inconvenience of the secondary effects of bromide of potassium. He begins with small doses, and has continued the use of the drug for several months without any bad consequences, in daily doses of from 5 grammes 50 to 5 grammes 50 (1 to 2 drachms). Moreover, Dr. Lander thinks that the bromide is converted into a chloride in the stomach, so he suggests the immediate use of the chloride.—*Philad. Med. Times*.

CARBOLIC ACID IN PRURITUS.

In prurigo and pruritus, says Dr. Pintschovius, the *Allgemeine Medicinische Central Zeitung*, I have successfully tried carbolie acid externally. I prescribe a solution containing 2½ per cent. of carbolie acid, and of this direct a tablespoonful to be mixed with a teacupful of rain-water. Every morning and evening the diseased skin is thoroughly sponged with this. I treated thirty patients in this way, and every one has recovered in from three to eight days' time.—*Medical and Surgical Reporter*.

VERATRUM VIRIDE AS A HEMOSTATIC.

Dr. J. W. Collin calls the attention of the profession to the veratrum viride as a very powerful and very reliable agent for the arrest of hemorrhage, both active and passive. It should be given in doses of from three to fifteen drops, repeated every one, two, or three hours, according to the urgency of the case, always carefully watching its effects.—*American Practitioner*, Sept.

POWDERED ACETATE OF LEAD FOR HÆMORRHOIDS.

M. Decondé has obtained very good results by the application of acetate of lead to hæmorrhoids. He places the finely powdered salt in a canula, which he introduces into the rectum, and then by means of a syringe forces the powder out.—*Revue de Thép. Medico-Chirurg.*, Aug. 1, 1872.

TREATMENT OF GONORRHOEA BY TANNO-GLYCERINE PASTE.

Dr. Tomowitz, K.K., Regiments Arzt, Austrian Army, reports the successful employment of a modified Schuster's (Aix-la-Chapelle) tanno-glycerine paste for syphilis and gonorrhœa. His formula is as follows:

R Acidii tannici..... 3 ss.
Opii pulveris..... gr. iv.
Glycerinæ..... q. s. ut ft. pasta.

Some 50–60 drops glycerine are requisite to bring the paste to a proper consistency. A sound or elastic

bougie is dipped into the paste warmed over a stove or spirit-lamp, and thus smeared is introduced into the orificium penis to the fossa navicularis, where it is held for five minutes. This operation is repeated three times a day. In gleet the catheter or bougie is carried back to the bladder and slowly withdrawn, so as to bring the paste into contact with every surface of the urethra. Even in acute cases the pain is but very slight.—*Allg. Militarärztl. Zeit.*

PRURITUS VULVÆ.

LISFRANC.

Take of Bichloride of mercury.....	1 part.
Alum	20 parts.
Starch	100 "
Water	2,500 "

Mix.

S. Apply freely to the part.—*Revue de Thérap.*THE CANADA MEDICAL RECORD
A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, MAY, 1873.

SUPPLY AND DEMAND.

A few years ago, it was a common thing to hear expressed—that the profession of Medicine in Canada was overcrowded, and that a large proportion of those graduating, would have to subsist upon but scant success, while not a few would be compelled to seek other methods of gaining a livelihood. While to a certain extent this expression was doubtless correct, yet we never believed that it was correct to the extent implied. If we can judge from facts which have lately come to our knowledge, it is, however, far from correct now. The impetus given to the country by Confederation has, by largely increasing our population, made the demand for medical men greater than it has been for many years. In several of our daily papers we have noticed advertisements, stating that a physician was wanted in a certain locality, while we are informed that the Dean of Bishop's College had applications from four different localities for medical graduates. McGill College and other medical schools doubtless had many similar applications, so that we may now fairly believe that the demand is fully equal to the supply. In the city of Montreal, within the past two years, fully twenty-five new medical men have commenced practice, all of whom are, we understand, making satisfactory headway.

MONTREAL GENERAL HOSPITAL.

Just as we are putting the *Record* to press we have received a communication signed "Junior Practitioner," which is somewhat verbose, and which we are therefore unable to insert. He, however, informs us (and we confess the information was news to us) that several meetings of the Board of Management of the Montreal General Hospital have recently been held, at which the advisability of increasing the number of attending physicians, and also the propriety of some of the older members of the staff, retiring upon the Consulting Board or being made Honorary Governors, was discussed. He states "that the Board of Management were largely in favor of such a change, which would afford the younger members of the profession in the city, an opportunity of assisting in the work of the Hospital, and profiting by the vast experience which such a practice affords,"

"It appears, however, that the exclusive policy which has heretofore characterised the Medical Board, is likely still to prevail. At a meeting at which the Medical Board were invited to be present the proposition received their united opposition from the senior member of the Consulting Staff downwards, so that for the present at least, the matter is likely to be allowed to drop."

Our correspondent complains that such a policy savors strongly of exclusiveness and monopoly, and is a gross injustice to the profession in the city. He says, "the principal arguments used against the proposed change were that the present staff were competent to discharge the duties required of them (which he regards as an unfair light in which to put the question) and secondly that it was undesirable and dangerous to the harmony of the Institution, to admit any one connected with any other school than the one to which all the Medical staff, but one, are attached." This objection," he says, "is flimsy, and does not meet the case, as there are many competent men not belonging to any school, who would be candidates were any vacancies to occur."

This is the gist of the letter, and upon it we will have something to say in our next number. In the meantime, we may remark, that our correspondent is not connected with any school, and is, we believe, likely to be well informed upon what he has written.

CHAIR OF CHEMISTRY, BISHOP'S COLLEGE.

We direct attention to the advertisement concerning the Chair of Chemistry in this School.

UNIVERSITY OF BISHOP'S COLLEGE MEDICAL FACULTY.

The Second Annual Convocation of this Faculty took place in the University Buildings, Lennoxville, Que., on Thursday afternoon, the 3rd of April. There was a very large attendance of ladies and gentlemen from the vicinity and from Sherbrooke. The chair was occupied by the Hon. Edward Hale, Chancellor of the University, having on his right His Lordship Bishop Williams, of Quebec, President of the Corporation, and on his left the Rev. Dr. Nichols, Principal of the College. Dr. Edmond Robillard, one of the Governors of the College of Physicians and Surgeons of Lower Canada, received the *ad Eundem* degree of C.M., M.D.

The following gentlemen were presented by Dr. David, the Dean of the Medical Faculty, and severally received the degree of C.M., M.D.:—

George B. Shaw, Ottawa, Ontario.

Godfroi Dubuc, Chambly, Que.

George F. Slack, Montreal.

Isaac Fontaine, St. Barnabé.

F. Charles Laurence, Richmond, Que.

Robert F. Godfrey, Montreal.

William Macdonald, Montreal.

Gaspard U. Peltier, St. Guillaume.

Dr. David announced that the Medical Faculty had the past season occupied their new building, which had been found to answer admirably every want. The number of students enrolled on the College Register was thirty—three being from the Province of Ontario, and the remainder from the Province of Quebec. The valedictory address on behalf of the graduates was delivered by Dr. George B. Shaw, while the address to the graduates was delivered by Professor Godfrey.

The Rev. Dean Slack subsequently addressed the Convocation.

Quite a number of the Medical men of the vicinity were present.

At the last annual meeting of the Ontario College of Pharmacy, held in Toronto, it was decided that the Diplomas of the Pharmaceutical Association of the Province of Quebec, the Pharmaceutical Society of Great Britain, and the Philadelphia College of Pharmacy, would be recognized by that College, and such diplomas would be considered by the Board of Examiners as sufficient evidence of the qualification of the holders thereof.

It is a matter of regret to all true friends of progress, that the local legislature has not yet placed the Pharmaceutical Association of the Province of Quebec on the same footing as the sister Association holds in Ontario.—*Com.*

SPECIAL NOTICES.

Mr. Richmond Spencer, Druggist, McGill street, has a large stock of drugs and instruments on hand. We direct attention to his advertisement.

Mr. H. R. Gray, Druggist, St. Lawrence street, has several specialities, and offers good facilities for physicians in the country to deal with him.

Mr. James Goulden has within a few years rapidly extended his business. He has now three shops in active operation in various quarters of the city, all of which are doing a large trade. He has a very large stock of trusses on hand, to which he invites special attention.

Mr. Ebenezer Muir's, Place D'Armes Drug Store, is in one of the most prominent localities in the city, and is, therefore, admirably placed to attract business. In the matter of Vaccine, Mr. Muir asks the attention of the profession. It can always be obtained from him, and may be thoroughly relied upon. Orders by mail promptly attended to.

There is a practice for sale in one of the most thriving localities in the Eastern Townships. No opposition. The editor of the *Record* will supply full information. Enclose a stamp for reply.

TO OUR SUBSCRIBERS.

With the issue of two more numbers our first volume will close; we therefore respectfully ask those who have not remitted the amount of their subscription to do so immediately.

Receipts will be enclosed in the issue of the *Record* immediately following the receipt of the money.

PERSONAL.

Dr. Colin Sewell, of Montreal, has relinquished practice, and sails this month for England, *en route* for Melbourne, Australia, where, we believe, he intends establishing himself. We regret the cause, (illness of his wife) which compels him to seek a more congenial climate, and, in his new sphere, he has our warmest wishes for his success, accompanied with the sincere hope that the change may be the means of restoring Mrs. Sewell to complete health. During the seven years that Dr. Sewell has resided in Montreal, he has been held in high estimation by all his *confrères*, who deeply regret his departure.

On Thursday evening, the 17th of April, a number of his personal friends in the Medical profession entertained him to a dinner, which was one of the pleasantest social gatherings we have attended for a

long time. When the Medico-Chirurgical Society of Montreal met on Friday evening, the 18th instant, the following resolution was carried unanimously:

Moved by Dr. Francis W. Campbell, seconded by Dr. George E. Fenwick.—That this Society has learned with sincere regret of the approaching departure from Montreal of their fellow-member Dr. Colin C. Sewell. They desire to place upon record their estimation of his gentlemanly qualities and high professional abilities, and at the same time to express their sympathy with the cause (illness of Mrs. Sewell) which compels him to leave Montreal, and the professional success which has attended him.

Dr. Montizambert and staff have taken up their quarters at Grosse Isle, and commenced duty. Dr. M. is an able and arduous officer, and we feel that in his hands quarantine regulations will be strictly enforced.

The Medical profession is worthily represented at present in the Dominion Cabinet by the Hon. Dr. Tupper, C.B., Minister of Customs, a graduate of the University of Edinburgh, and by our fellow-student, the Hon. Dr. Theodore Robitaille, a graduate of McGill College, who has recently been appointed Receiver-General.

Dr. Francis W. Campbell has resigned his appointment as Attending Physician to the Montreal Dispensary, after a service of nearly ten years. The Board of Governors passed a vote of thanks to him for his faithful services, and elected him to the Consulting Staff. Dr. John Bell has been elected to fill the vacancy created by Dr. Campbell's resignation.

Report of Societies.

MEDICO-CHIRURGICAL SOCIETY, MONTREAL.

Meeting held 4th April 1873.

Dr. John Reddy, Vice-president, in the chair.

Dr. William Burland read a paper on Cerebral Hemorrhage. The patient, Mrs. G., while sitting taking her tea was noticed to suddenly cease speaking and drop her head upon her chest. When spoken, to she did not reply, and on shaking her she was found to be insensible. He, Dr. Burland, was sent for. On his arrival she was comatose—pulse soft, slow and compressible; face pale and natural; pupils contracted, and the eyeballs fixed.

There was considerable emesis of the appearance and consistence of coffee grounds, and she had micturated and defecated involuntarily. She was a large

woman, rather of the phlegmatic habit; was fifty-four years of age; had suffered from rheumatism, and frequently complained of great pain in the head over the parietal region, on which occasions more or less stupor succeeded these head symptoms; had moreover suffered from so called gravel. Shortly after Dr. Burland arrived patient had a convulsive attack lasting a few seconds, and followed by an increase in heart's action, pulse being full and bounding, no alteration in the color of the face, nor was there any evidence of paralysis; the pupils much contracted and on strabismus. Vomiting soon set in followed by stertorous respiration, which, however, soon lost its pitch and became much hurried; pulse being 60, respiration 32; a clammy sweat bedewed her body; administered two ounces of Brandy, no impairment of deglutition from the fact of her being able to take the brandy. Dr. Roddick now saw the case in consultation. Discovered no heart murmur. Hemiplegia now well marked, right side being affected. The case was treated on the principle of counter-irritation, synapism to nape of neck, followed by blister, synapism to the epigastric region, and a stimulating enema of castor oil and turpentine; this produced copious evacuations and caused the temperature to be somewhat increased. Late in the evening had another convulsive attack, after which paralysis of the left side of the face was discovered. The symptoms following this, marked approaching dissolution; the heart's action became tumultuous; the pulse full but very irregular; respiration exceedingly harsh, and the contents of her bowels were evacuated profusely.

Reactionary stage set in rapidly, pulse becoming soft and thready; breathing laboured, the respiratory muscles acting forcibly and the temperature fell considerably; pupils dilated and insensible; remained in this condition about two hours, when she died comatose about 3 o'clock in the morning.

Autopsy showed the following: dura-mater firmly adherent to calvarium, the former intensely injected; entire surface covered with points of bleeding veins, it was also dark; surface of both hemispheres covered by large veins gorged with blood. Arachnoid was thickened with effusion of serolymph; beneath it sub-arachnoidean spaces were filled with serum in which flocculi of lymph were floating. The puncta vasculosa were large and injected; the whole of the left lateral ventricle was filled by a blood clot, which had also broken down by its pressure a large portion of the brain matter; this clot was firm and very dark, and extended through the mid line into the ventricle of the opposite hemisphere. Extensive atheromatous disease was discovered in the arteries.

Dr. Roddick read a case of Hemiplegia of the right side with aphasia. The patient, a short, stout man, had been temperate for twenty years. He was employed as a gaol guard, and on the morning of the attack when he returned home to breakfast, his wife noticed that tobacco juice was trickling out at one side of his mouth. When drinking his coffee it also ran out at the same side. After breakfast he attempted to split some wood, but the axe flew out of his hands. In spite of the earnest remonstrances of his wife he returned to his duty. When on guard in the afternoon, he was noticed by his comrades to fall, and when picked up he was quite insensible. He was at once removed to his house. In about an hour he became partly sensible, and was able to say "Yes." Two days after, he was admitted to the Montreal General Hospital, when there was found to be complete paralysis of the right side. He could not say anything consecutively, and his feces and urine were passed involuntary. On the day after his admission when asked to write his name (George Davis) he with his left hand (he was left-handed) wrote George, sometimes only Davis, never together, but at times the letters of both names were sometimes mixed. He did not improve, but on the contrary gradually got worse, and died on the fifth day after admission.

Autopsy.—Membranes and surface of brain healthy. On cutting into it an extensive patch of softening was found external to and above the corpus striatum of the left side, extending outwards for about an inch. Corpus itself was of less consistency than usual, and it, as well as the softened brain substance, was of a brownish yellow colour. The rest of the brain was to all appearance healthy.

Heart—Very large, weight 21 ozs. A large straw-colored anti-mortem clot was found in the right auricle, completely filling it, passing thence through the tricuspid orifice into the right ventricle, and extending for about an inch into the pulmonary artery.

Lungs—Much congested, but otherwise healthy.

Kidneys—Healthy; considerable amount of fat in pelvis.

Liver, &c., healthy.

DIED.

On the 19th inst., at 20 McTavish street, Montreal, Janet Stuart, eldest daughter of the late Michael McCulloch, M.D.

—At Ogdensburg, N. Y., February 1, 1873, aged 71, Hon. SOCRATES NORTON SHERMAN, M.D., an eminent physician and citizen of Ogdensburg, and formerly representative in Congress of that district.

MONTREAL:

Printed by JOHN LOVELL, No. 23 & 25 St. Nicholas Street.

Original Communications.

A Case of Rheumatism of the Gravid Uterus ; by E. H. Trenholme, M.D., Prof. Midwifery and Diseases of Women and Children, University of Bishop's College, &c.

(Read before the Medico-Chirurgical Society of Montreal, May 2.)

The following brief notes are presented to this Society on account of the peculiarity of the case brought before you, and the absence, so far as I have been able to ascertain, of any notice of Rheumatism of the uterus by writers upon the diseases of women and children.

Mrs. E. J. P. is æt. 31 years, native of Canada, Irish parentage, spare habit, well developed, and of healthy appearance, the mother of several children, and now in the 6th month of gestation. Her previous history good, supports herself and family by sewing. Had a fall down stairs about the 1st Jan., 1873, but except slight pains in the hips, which soon passed away, has not suffered any inconvenience from the accident. Present condition : On 27th Jan., without any cause so far as she is aware, was laid up with a sudden and severe attack of sub-acute rheumatism of the right shoulder, which was hot, tender and so painful that any movement of the joint was impossible. In all other respects she seemed well.

28th Jan.—Passed a restless night and is suffering very much from agonizing pain at the pit of the stomach, which is intensified during each respiration. The breathing is shallow and rapid, and says she feels with each attack of pain, that there is a spasm or constriction around the lower part of the ribs. There is considerable irritability of the stomach and tendency to vomit. Pains in shoulder slight, urine scanty and high-colored. Pulse 85, skin hot and dry; ordered turpentine stupes to pit of stomach, and gave the patient aconite internally.

29th.—Passed a very bad night; no sleep. Pains at pit of stomach and base of chest much the same. There are also severe pains in lumbar muscles. Stupes continued to seats of pain. As skin was acting freely and nausea but slight, I gave Bryonia Alba alternately with aconite every 2 hours.

30th.—Pains gone from pit of stomach, and diaphragm and lumbar region, but the uterus is the seat of the most intense agony; there are also tenderness and swelling of both knees. Patient passed a restless, sleepless night, and seems much exhausted as she has been unable to sleep or eat for the last 4 days. Examined the os uteri and found it normal. There are no indications of abortion. Discontinued the aconite, and gave Pulv. Dov. with

Morphia every five hours. Hot turpentine stupes continued.

31st.—Slight pains at pit of stomach, but do not interfere much with respiration; lumbar pains also present. Uterine pains much the same as yesterday. Treatment continued.

1st Feb.—Pains in uterus most severe. Slight pains at pit of stomach and small of back. Urine in addition to its being scanty and high-colored, is irritating and renders micturition painful. Pulse 100. Great restlessness; skin acting well and not very hot. Gave Bryonia every 3 hours, and Dover's powder at night.

Feb. 2nd.—Uterine pains unrelieved and continuous. At times the organ seems to contract and increase the agony. Slight pains in knees and thighs and not elsewhere. Passed a sleepless night as usual. Pulse 112; tongue furred; bowels unmoved for four days; skin acting well. Omitted the Dover's powder and ordered the following: *R. Pot. Iod. 3 jss., Pot Bicarb 3 iijss., Vin. colch 3 j. aqad viii.* Tablespoonful every 3 hours. I may say that at this stage of the disease, I feared abortion would result on account of the supervention of spasms of the uterus. The question of aiding the removal of the ovum presented itself to my mind, but was not entertained as I dreaded a fatal result, should active inflammation supervene upon the present rheumatic state of the organ.

Feb. 3rd.—Obtained relief from the agonizing pains in the womb at midnight, and had her first sleep for many days. The womb is very sensitive to the touch, but easy when quiet. Slight pains in the knees and right shoulder, but none elsewhere; bowels moved twice during the night. Pulse 96; skin normal. Urine more abundant and lighter in color. No dysuria. Treatment continued.

From this time the patient continued to improve, and was so well as to be able to attend to her occupation and walk about the city before the end of another week.

I am sorry to say that, owing to a midnight hegira, I have lost track of the case, and have not been able, as I had hoped, to note the results of the disease upon her child nor its effects upon her confinement.

Montreal, Victoria Square, April, 1873.

Notes of a case of Cerebro-Spinal Meningitis.—

By JOHN BELL, M.A., M.D.

(Read before the Medico-Chirurgical Society of Montreal, May 16, 1873.)

On Wednesday, April 9th, 1873, I was called to

see a girl, A. R., aged 13, who had been attending one of the public schools, for the spring examinations in which she had been reading hard. During the summer she lives in the country, and has always been an unusually strong, well formed girl, very quiet and fond of out-door exercise. Her parents are both strong and healthy, as are also all the other children.

For five days before I was called in, she had been drowsy in the evenings, and did not feel so well as usual, which was considered to be the result of biliousness and hard study. When I saw her she had been vomiting, less or more, for some days, and complained of pain and an uncomfortable feeling in the head, with weakness and loss of appetite. There was also pain in the lower part of the back, which she thought was due to her having been in bed since the day before. From the extremely dirty surroundings of the house in which she lived, and the other circumstances of the case, I at first suspected that, at the worst, this would prove to be a case of typhoid fever. I prescribed lime water and milk, which at once arrested the vomiting, and as recommended by Harley in the treatment of the early stage of typhoid fever, and which I always found very useful, I gave a few small doses of hydrarg cum cretâ. Her head was bathed frequently in cold water, which removed the headache. Until Sunday, the 13th of April, she continued to improve in every way, her tongue, which at first had been coated, cleaned off, leaving only a dirty streak along the middle. The headache had disappeared, although there still remained some pain in the lumbar region, and sometimes between the shoulders. I had seen her at 2 p.m., in the above apparently convalescent condition, and she had fallen asleep feeling unusually well, but in about an hour afterwards she woke up unable to speak, and I was sent for in haste, as it was supposed she was dying. I found her pulse 104, temperature 100·6. Her bowels not having been moved as usual during the day, I gave her a purgative dose of calomel, and left a few gr. xx, doses of bromid of potass. I now thought that I had a case of cerebro-spinal meningitis to treat, probably of the epidemic form. From this time I took notes of the case, and will merely copy them from my pocket book, even at the risk of being prolix and particular.

April 14th, 10 a.m., pulse 112, temperature 100·7.

Rather more conscious than she was last night. Forms her mouth to speak, but cannot utter a word. There is stiffness of neck and back on attempting to move. To have snow, covered with flannel, constantly applied to head and back of neck.

6 p.m., r.* 25, p.† 112, t.‡ 100·8 Began to speak about one this afternoon. Is very drowsy and irritable when disturbed. To have calomel gr. j. every four hours, and potass. bromid gr. x., potass. iodid gr. v., quiniæ disulph gr. j., at the same intervals of time.

April 15th, 11 a.m., r. 30, p. 120, t. 100·5. Became almost perfectly conscious at about half-past two this morning, and thought it was still Sunday night. Bowels moved twice during the night. Neck not so rigid as formerly, and has no pain except when moved. There is some pain in the muscles of the legs when they are forcibly straightened, but none when flexed.

6 p.m., r. 28, p. 112, t. 100·8.

April 16th, 11 a.m., r. 27, p. 112, t. 99·2. She became quite conscious about three o'clock this morning. Neck still stiff and pain caused by attempt to bend head forward. Belly still somewhat retracted. She passed an alvine evacuation of a dark greenish brown color in bed this morning. A few bright red, slightly raised, acuminate spots are out on her arms this morning.

6 p.m., p. 120, t. 100·8.

11 p.m., r. 28, p. 112, t. 99·6. Has passed three motions in bed during the day. During the day occasionally felt the bed clothes as if measuring the edge of the coverlet, and if disturbed she drew the clothes with both hand up under her chin and rested quietly in that position. The skin was very warm at six, now it is cool, with slight *cutis anserina*. She is continuing the same medicine and applications and has for diet, beef tea, milk and eggs.

April 17, Thursday, 11 a.m., r. 32, p. 135, t. 99·5. Rested quietly all night. Not quite so conscious as before but knows those around her and asks for drinks. Passes evacuations in bed, but is evidently aware of it.

6 p.m., r. 33, p. 140, t. 100·6. Is apparently conscious, but does not seem like her usual self. Gums slightly affected, bleeding when pressed; stopped calomel powders.

April 18th, r. 34, p. 150, t. 101·2. Slept from eleven last night till eight this morning, when she was taken out of bed to have it changed, during which process she helped herself a good deal though weak. During sleep she occasionally picked at the bedclothes. Her bowels were moved twice in bed during the night, yet this morning she asked to get up to stool. Has been very thirsty yesterday and this morning. Talks quite sensibly but peevishly. Has

* r. respiration; † p. pulse; ‡ t. temperature.

abnormal sensations, *e. g.*, imagines that her chemise is rolled up on her back and wants to have it pulled down. Has some pain in her head, but appears to move it more easily than before. Finished her medicine this morning. To have half an ounce of wine every two hours.

6 p.m., r. 34, p. 135, t. 98.4. Has been quite conscious—knew her father who came in from the country. Takes interest in passing conversation. Was sponged all over. Bowels moved once in bed after bath. Is now taking only food and wine. There is slight external strabismus of right eye. Forehead cold from profuse perspiration.

April 19th: morning visit. R. 33, p. 135, t. 100.2. Has slept very quietly all night and said nothing but ask for drinks. Passed a thin yellowish stool in bed, about eight, a.m. Pulse softer than it has been. Perspires freely, and face flushes red at times. Is more correct in her appreciation of sensations than she has been, *e. g.*, as to where her clothes are and as to impressions made by things in contact with her. Has perfect use of her limbs. Both pupils have all along been widely dilated, except at the commencement of the attack, when the left one was somewhat smaller than the right. To have one ounce of wine every two hours.

6 p.m., r. 38, p. 148, t. 100.6. Is quite conscious and able to speak perfectly. Complains of pains in the middle of the back and in her legs when they are moved. Eyes suffused, slightly reddish. On a level with the right lower lid there is evidently ulceration through the conjunctival layer of the cornea, from which proceed numerous enlarged capillaries. Tongue slightly coated. To have the former bromid and iodid mixture every four hours.

April 20, Sunday, 1–30 a.m., r. 46, p. 160, t. 100.8. Condition of right cornea same as before. Both irides are widely dilated and are of a uniform light yellowish colour, and apparently homogeneous structure from the deposit of lymph. They are unaffected by light, and she cannot see. There is some dulness of the lower posterior part of right lung.

9 a.m., pulse about 170, dichrotous, r. 46, t. 102. Answers questions intelligently, puts out tongue when asked, &c. Perspiring freely. Cheeks with a purplish flush. Eyes in same condition as last night. To have one ounce of wine every half hour until next visit.

11.30. Has just died. Face not very pale. Cornea clear. Irises same as before. Lower back part of right lung dull on percussion. Apex in front almost tympanitic.

POST MORTEM EXAMINATION FORTY-EIGHT HOURS AFTER DEATH.

Owing to unavoidable circumstances a post mortem examination could not be obtained until Tuesday afternoon, when the friends of the deceased were beginning to assemble for the funeral, so that the examination was necessarily hurried. I am indebted to Dr. Roddick for making it with me. The brain and spinal cord as far down as the fifth dorsal vertebra were the only parts examined. The veins of both the *dura* and *pia mater*, throughout the entire extent of both membranes, were intensely congested with dark, fluid blood. The arachnoid membrane seemed to be more opaque than normal and small quantities of pellucid lymph coated the surface of the base of the brain, particularly in the region of the optic commissure glueing the fissures and convolutions together, and presenting an irregular or granular appearance when these parts were torn asunder. The quantity of sub-arachnoid fluid did not seem to be much increased, or else it must have escaped in removing the brain. The same conditions existed in the part of the spinal cord examined, and in addition the venous plexus separating the cord from its bony canal was gorged with blood. Under the microscope small portions of the cord presented capillaries containing single and double rows of blood globules slightly overlapping one another, but I am ignorant if that be a pathological condition or not. The brain substance seemed to be even more than usually tough and sticky. The *puncta vasculosa* presented about the usual appearance. The *choroid plexus* was very vascular and prominent. There was about two drachms of fluid in the left lateral ventricle, but with that exception the quantity in the others was normal. No time was allowed for further investigation.

Judging from the *post mortem* appearances of the meninges of the brain and spinal cord, I think that the local abstraction of blood and frequent dry cupping of the back of the neck and spine, would have proved powerful adjuvants in the more successful treatment of this case, although Radcliffe, in his article on "Epidemic cerebro-spinal meningitis," in Reynold's "System of Medicine," says: "It does not appear that any decided good has arisen" from the administration of iodide of potassium, it appears to me that it would prove useful, judging from its almost specific influence over periostitis, an inflammation of a structure very similar to the meninges of the brain, and from its effect in stimulating the removal of effused material. I have used these remedies with good results in two cases, which have

come under my care since the one reported above, and which have been under treatment for four and three weeks respectively. The pain in the head and back was always relieved by cupping, and the condition of the patient improved generally, at least for the time. But these patients still remain in a low, weak sort of typhoid condition, which has been met with, I understand, in the practice of other gentlemen, and as to the treatment of which, I would like to hear an expression of opinion. I have also met with some patients suffering from such symptoms as vomiting, severe pains in the head and back, with stiffness of the neck, pain in the bowels, and varying differences in the size of the pupils, and others which seemed to me to indicate a mild attack of this disease, but which passed away on the administration of mercury, bromid and iodid of potass, with the application of cups to back of neck and spine and cold to these parts and the head.

1 Beaver Hall Terrace, May 16, 1873.

Two years and a half in a London General Hospital. By G. F. SLACK, B.A., C.M., M.D., M.R.C.S. Eng., late House Surgeon, Charing Cross Hospital, London.

Syphilitic affections of the tongue come very frequently under notice in London. Such cases, as a rule, occur in middle-aged or old people belonging to that class, or I might almost say race, who spend all their days and many of their nights in the open air, eating little and at irregular times, and drinking whenever an opportunity offers of their doing so. They are poorly clad and exposed to all sorts of weather, contract syphilis and undergo little or no treatment for it, until they are reduced to such a deplorable condition that they are taken into some hospital out of sheer pity. Such cases yield very slowly to treatment. Good food, beer, cleanliness, etc., being the chief requirements, followed by a course of iodide of potassium, in gradually increasing doses, or mercury. In some of these cases which have been neglected and the disease allowed to run its course unchecked, there is some difficulty in deciding whether syphilis has produced the mischief, whether the patient is suffering from malignant disease of the tongue, whether the two affections may co-exist, or whether the one may follow the other. Of this I am certain, that I saw two or three cases of long-standing disease of the tongue, the exact nature and cause of which it took several weeks of careful observation to determine, and even then there was some doubt expressed. These cases were ex-

amined and treated by gentlemen who had had many years of hospital practice, and, consequently, during that time, an immense number of cases of all kinds had passed through their hands. With regard to cases of malignant disease of the tongue, I had the opportunity of seeing a good many operated on and watching the after treatment and results. When the operation is performed with care and before the disease has extended to any great extent, a fair proportion of cases recovered, some completely, others were relieved for a time. Generally, a many-stranded wire ecraseur was used. Sometimes a single wire. The following cases are examples:—

Case 1.—A thin, delicate woman, aged 62, was sent into hospital for operation. On the right side of the tongue, near the root, there was a red nodular growth about the size of a hazel nut, no teeth on that side. She had suffered very little pain and had only noticed it about a month before. One gland beneath the jaw on the right side was enlarged. General health fair. The diseased portion was removed in the following manner: an incision was made in the median line from the symphysis to the hyoid bone, and another joining it along the ramus of the jaw. The knife was then passed beneath the tongue and out of this opening, thus making a V shaped flap. Through the opening thus made, the tongue was dragged out with a pair of strong forceps, a many-stranded wire ecraseur passed over it, and the greater portion of it slowly removed. The bleeding was very slight and lasted only a few minutes. The case went on favorably for five or six days, when she had a slight attack of facial erysipelas, from which she recovered in a few days and was able to eat fish, sit up the greater part of the day, and talk pretty distinctly. The opening along the ramus of the jaw remained open, discharging slightly for some time. The tongue, or rather what remained of it, assumed a healthy appearance, and a month after the operation she left the hospital.

Case 2.—A man about 50 years of age, stout and healthy, was admitted with a growth in the middle of the tongue, near the tip. It had been coming on gradually, gave him a great deal of pain, especially when handled, and prevented him taking sufficient solid food. He had suffered from an attack of syphilis some years previously, but a long course of mercury, iodide of potassium, and nourishing food, seemed only to have had the effect of arresting the progress, not of removing the growth, so that, as the man wanted to get back to work, it was decided to remove the unhealthy portion of the tongue, which was easily done by slipping an ecraseur over it.

There was very little bleeding, and in a couple of days he was pretty comfortable. At the end of a month he was quite well again, and left the hospital.

Case 3.—A thin, nervous, single woman, aged 30, was sent up from the country for advice concerning a growth on the side of her tongue. It was decided to try and relieve her by removing only that portion of the tongue that was affected. It was done in the following way: Three strands of twisted wire were passed through the eye of a large, long needle, and the needle was then passed through the tongue behind the growth. The wire was slowly twisted until it had cut its way out of the side. The growth was then seized with a pair of strong forceps, drawn forward a little, the wire slipped over it and slowly twisted until it came away, thus removing the diseased part only and leaving the tip and the sound side. The woman made a rapid recovery and went away to the country. In a few months, however, she called to shew her tongue, as she found that the disease was returning and advancing much more rapidly than in the first instance, in fact, in a few weeks it had extended so far that no further operation was justifiable. She died soon after. This case shows that too much care cannot be taken in operating on the tongue, that the ecraseur should pass through perfectly sound tissue, well behind and away from the disease, otherwise the operation will only do mischief and hasten the death of the patient. In speaking of removal of the tongue by means of an ecraseur, I would like to draw special attention to the use of a many-stranded instrument in preference to one with a single wire. In the cases related above, several strands of fine wire, well twisted, were used, and the hemorrhage was very slight. In the following case a single medium-sized wire was used with a very different result:

A baby, about six months old, was admitted with hypertrophy of the tongue. It hung out of its mouth, causing great disfigurement and preventing the mother putting the child to the breast. The tongue was seized about the middle with a pair of forceps, a single wired ecraseur was passed over it, and about an inch and a half of the tip slowly removed. The bleeding was very great, so much so that the child's life was for a time endangered. The tongue had to be dragged out, and the bleeding vessels secured with ligatures. The single-wired ecraseur cut like a knife, differing only from that mode of operating in that the pain the child had to endure was far greater than that following removal by a knife. The child, however, made a rapid recovery, the ligatures soon coming away and the end of the

tongue slowly contracting and receding into the mouth. Some London surgeons prefer to use the knife in operations on the tongue. They claim that time and much needless pain is saved by this method, and that the fear of the hemorrhage need not prevent the use of the knife, as the vessels are easily picked up and tied, if the precaution is taken before operating of passing a strong cord through the tongue behind the point where it is intended to remove it, so that there is no danger of its retracting after a portion has been cut off. I think that, in many cases, where the disease does not extend too far back this mode of operating ought always to be followed, since in operations about the mouth it is not at all an easy matter to keep the patient under the influence of chloroform for any length of time. With regard to removal of the tongue by galvano-cautery, I have only seen one case treated in that way, and that was a baby, with a greatly hypertrophied tongue. There was little hemorrhage, but the child lived only a fortnight after the operation, dying from exhaustion; the tongue stump being so much inflamed that sufficient nourishment could not be administered. However, there have been several cases successfully treated by this method. It has one great advantage, and that is the saving of time.

In England, stone in the bladder is a very common complaint, but such cases, if not treated at hospitals specially intended for that purpose, generally come under the care of a few surgeons who have become noted in that branch of their profession, Sir Henry Thompson, Sir William Ferguson, and others, so that, in a general hospital, one has not very many opportunities of studying such cases. I might mention one case, which is interesting on account of the many complications which occurred and the rapid recovery after the operation:

A strong built, otherwise healthy gentleman, had been suffering for many years from a very hard, unmanageable stricture of the urethra. During the latter part of that time his sufferings had greatly increased, so that he could get no rest day or night. With some difficulty a very small sound was introduced into the bladder, and a large stone detected. On a consultation taking place, lithotomy was decided upon, and was successfully performed, the following difficulties arising. With very great difficulty, a small staff was introduced, the necessary cuts were made and the bladder reached, the stricture being completely divided in so doing. The perineum was very deep and there was a great deal of hemorrhage. When the stone, which was very large, was grasped, it crumbled to pieces,

and a long time was taken up in removing these fragments. For an hour after, it was only with the closest attention that the patient was prevented from dying from the effects of the chloroform. However, notwithstanding all these complications, he rallied and made a very rapid recovery, going down to the country five weeks from the day of operation. Care was taken to keep the passage well open by passing a catheter every second day, so that when the parts were healed a number ten could be introduced with ease.

To be continued.

Correspondence.

To the Editor of the Canada Medical Record.

MR. EDITOR,—Would you kindly inform me if the "*Canada Medical and Surgical Journal*" is the authorized and accepted organ of the Medical Faculty of McGill College.

SIGMA.

Montreal, 7th May, 1873.

[Our correspondent puts a straightforward question, and if we were inclined to judge the case from circumstantial evidence, we would answer that the *Canada Medical and Surgical Journal* is the organ of McGill College. We have, however, made some inquiries, and we are assured upon good authority, that the highest medical officer of McGill College states that the Medical Faculty of that institution do not in any way recognise the *Journal* as their organ; in fact, that they repudiate any connection with it. We confess that this information surprises us; but, as our authority is unquestionable, we cannot doubt it. Such being the case, we hope that its editor will remember that there are several medical schools in the Dominion, and that common justice demands that he should give the names of those who have successfully passed their examination, or as many as he can obtain returns from. If he does not do this, he cannot complain if the medical public think, notwithstanding what we have said, that at least he is not an impartial recorder of events.]

To the Editor of the Medical Record.

DEAR SIR,—In my address to the graduates of Bishop's College, on the 3rd of April last, I stated that Professor Garduer was the first physician in the

city who treated Cerebro-Spinal Meningitis. I should have said he was the first physician who brought the disease before the notice of the Medico-Chirurgical Society of Montreal. By making this correction in your next number you will oblige,

Yours very truly,

R. T. GODFREY, M.D.

Montreal, 27th May, 1873.

Progress of Medical Science.

CLINICAL LECTURE ON LUPUS.

By HENRY JAMES, M.D., Dub.,

Physician to Mercer's Hospital, Lecturer on Practice of Medicine in the Ledwich school, &c.

GENTLEMEN,—From time to time you have had many opportunities of observing and studying this disease of the skin. The name I need hardly tell you is derived from the Latin, signifying either a wolf or a pike, both distinguished for their voracity, and hence comparable to this malady. Not indeed, as Divergie seems to suppose, from a visual resemblance, when he asks—"What analogy is there between the face of a person affected with lupus and that of a wolf?" The *noli me tangere* of the Romans is by most believed to have been this disease. The old English name was "the eating tetter."

There are three species of this disorder—*L. exedens*, *L. non-exedens*, and *L. erythematous* or *hypertrophicus*. I shall give you a brief account of each of these disorders.

L. exedens is the most destructive and disfiguring variety. It most commonly commences on the face, though its ravages are by no means limited to that part; extending in the case before you to the neck, and appearing in large isolated patches on both hands and forearms. The exact situation that it selects by preference for its assaults is one or other ala of the nose. The destructive process is sometimes almost simultaneously commenced on the inner and outer aspects, and advances equally from both sides till the cartilage is entirely destroyed, the result being such deformity as is well seen in the case of T. E. The commencement of the disease is usually a small papule or nodule, which is brownish red in colour, and causes no pain or itching. It appears hard, but if you press it with the point of a probe you find that it is easily penetrated and bleeds freely. Other similar papules form around this first one, all, in some cases, shedding continually dry scales of epithelium. The disease may remain for a long time in this stage. These papules are composed of numerous cells proliferated from the rete Malpighii, mingled with granules of sebaceous matter, and traversed by a large number of blood vessels, many of which are of new formation, chiefly derived from the papillary vessels which have increased in size. At the same time fibrous

tissue of new formation is developed, which connects the papular growth with the tissues beneath. The inflammation, which is essentially chronic, is of a special plastic character, being in *L. exedens* accompanied by a cellular hyperplasia, which, from incomplete nutrition, becomes the seat of an ulcerative process, with purulent exudation and formation of crusts.

As the malady advances from the papular stage previously mentioned, the skin around grows red tense and shining. A scab forms on the summit of one of the nodules; this quickly increases in size by the addition of fresh matter at the base, and thus the scabbing process proceeds till the part is covered. On removing forcibly the overlying scabs, the surface, which is sunk below the general level of the surrounding skin underneath, is found coated with a thin purulent ichorous fluid, through which granulations are protruding. These vary in size some being little larger than a millet seed, and others the bulk of a split hazel nut. These larger ones will, on examination with a moderate lens, be seen to be formed by the aggregation of a number of smaller granulations collected on a common base, which is often of a grayish hue. They are very vascular, bleeding freely when touched with a probe.

The opinions of Rindfleisch are of great value. He regards the disease as always an adenoma of a sebaceous or sudoriparous gland, and that the lupoid tubercles are so characteristic in origin and structure as to be recognisable by the microscope quite as certainly as cancer. The process begins as a luxuriant corpuscular proliferation in the interstitial and capsular connective tissue of the sebaceous and sudoriparous glands. The disease advances by the extension of this cell-proliferation to a variable distance.

The disease may now remain for a long period stationary and at length heal, as will presently be described. Or it may extend in depth or laterally by the continued formation of the special plastic tissue in either direction. This will be again followed by the ulcerative process, which may rapidly destroy the cartilages, and even bones, or the adjacent portions of the skin. Thus, in practice we find, as remarked by Bielt, two forms of *L. exedens*, the one profoundly, the other superficially, destructive.

During the progress of the case you will probably observe a few attempts at cure, secretion from the surface becoming arrested, and a whitish growth, composed mainly of fibrous tissue, appearing at the edges of the sore. Your hopes will often be disappointed by renewed outbreaks of the disease. At last, under suitable treatment, the healing process really occurs. From the whitish edge just alluded to, thin trabeculae stretch inwards towards the centre, and gradually the surface is covered with a thin, smooth, transparent layer of fibrous tissue, through which the subjacent blood vessels are visible. The layer in time becomes thicker, concealing the vessels beneath, and closely resembles the cicatrix produced by a severe burn. But the process does not end here, for the inherent tendency of this tissue is to contract, and thus some of the most hideous effects of the disease result. The eyelids are drawn down

(ectropium), the lips are drawn apart, exposing the gums, and the cheeks are dragged towards the neck.

Whilst this healing is taking place at one portion of the sore the malady may be extending at its edges. This form is called *Lupus serpiginosus exularans*.

Lupus non-exedens is characterised by the development of tubercles on the surfaces, as in the case of *L. exedens*; but there is this marked difference between these two varieties, that the non-exedens does not proceed to ulceration. Hence, we do not find the destruction of cartilages and bony structures as a consequence of this form of the disease. The cellular elements of the formation undergo fatty degeneration and absorption, whilst the fibroid tissue, attached to the deeper structures, contracts, depressing the surfaces, and leaving a deep reticulated scar.

Lupus erythematosus commences as somewhat circular patches of persistent erythema. These at first are level with the surrounding cuticle, but after a time become elevated to a greater or less degree. The fibrous tissue of the corium is greatly hypertrophied. Overlying it is the new growth, composed of numerous cells, which also fill the masses of the fibrous stroma. The sebaceous and hair follicles are also crowded with an exuberant formation of cellular elements. These cells also surround the hair shafts and the ducts of the glands, leading in this, as in the other varieties, to complete destruction of the glands of the affected part.

The gravity of this form of the malady varies much. In a case which has just been before us, it seems as if a circular patch, the size of a five shilling piece, had been hollowed out of the cheek to a little depth, and the excavation filled with currant jelly. Though the part appears so red and vascular it does not bleed so readily as in the other varieties. In another case, which I saw a few days since, the elevation is not so marked, whilst the superficial extent of the disease is much greater. The surrounding edges are slightly elevated, indurated, and of a dusky colour. In both these cases the malady affected the cheek, but it may also appear on the trunk or limbs. Any very chronic erythema should awaken your suspicions, such as a dull red patch upon the cheek, scalp, or nose, or chilblains, so-called, persisting during summer.

The amount of deformity left after the healing of *L. erythematosus*, varies with the extent to which the hetero-plastic and fibrous formations have proceeded. Whilst the edges are advancing, the disease at the point of origin shows a tendency to subside. Hard white interlacing cords are seen to traverse the centre, and the contracting force of the cicatrices may be as great as in either of the other forms. In some cases there is merely left a white glistening appearance of the integument traversed by a few enlarged red vessels.

Though we have described the three varieties of lupus as distinct, it must be remembered that they may all coexist, or one may pass insensibly into the other. The tendency being usually to pass from the non-ulcerating to the ulcerating.

The disease may also appear on the mucous sur-

faces, only secondarily, if at all, implicating the skin. Thus the septum narium may be destroyed before the exterior of the nose is engaged. The palate or pharynx may be deeply ulcerated, dangerous narrowing of the throat being so produced. Lupus of the vulva, mons veneris, and genito-crural folds also occurs.

I cannot agree in the view that this disease is merely local. Many persons affected with lupus seem to be in perfect health, but minute examination and close enquiry, will detect some flaw in the constitution—either congenital or acquired. The fact that the malady appears simultaneously on parts widely separated, such as the face and hands or feet, would strongly suggest some constitutional cause. Is this to be sought in derangement of hæmotosis leading to the formation of unhealthy bioplasm, as in the somewhat analogous case of fibroid phthisis? Or in the weakening of nervous force, permitting the morbid proliferation of perishable cells? The connection admitted by most authors between lupus and scrofula, would lend support to the former view, whilst the benefit derived from treatment by nervine tonics, especially phosphorus, would point to the latter as correct. In some cases in which no history of struma could be discovered, I have found mental depression, weakness, and unconquerable lassitude, which symptoms disappeared *pari passu* with the improvement in the condition of the sore. These remarks more especially apply to those cases in which the disease first manifests in the third and fourth decades of life.

Having already expressed my opinion of the constitutional origin of lupus in its various forms, you will be prepared to learn that I recommend a treatment addressed to the constitution as well as local applications. Of internal remedies I would assign the first place in merit to phosphorus. It is especially in cases where the disease has appeared in connection with failing nerve power that this remedy gives such happy results. In such failure, whether from overwork, continuous anxiety, excessively prolonged bodily labour, or venereal excesses, no medicine with which I am acquainted will give results at once so striking and reliable (a). I am in the habit of giving the metalloid dissolved in oil, and enclosed in capsules containing 1-30th, 1-20th and 1-10th of a grain of pure phosphorus. The first of these you should commence with after meals, and if no symptoms of the drug disagreeing appear, you may, after a week, give the 1-20th, and after another week proceed to the 1-10th capsule. The symptoms alluded to are a burning sensation in the epigastrium, relaxed bowels, lassitude, loss of appetite, and a white silvery tongue. Should these present themselves you may give the mineral acids in infusion of bark.

When the disease is connected with a history of struma, manifested either in the individual or the family, you will not neglect to give cod-liver oil, and will persist with this remedy for a long period, remembering that you are dealing with a diathesis.

(a) See cases in *Dublin Journal of Science* for January, 1872; article "On the Use of Phosphorus in Diseases of the Skin."

Remedies hardly inferior in such cases are fresh air, and an abundance of it, by night as well as by day, plenty of animal food, moderate exercise without fatigue, and recreation for the mind. Iodide of potassium and iodine are also recommended, as well as arsenic. I have not found this last drug at all so useful in this malady as in other chronic skin diseases. Various preparation of mercury, especially the bichloride, are said to have given good results. To the anæmic you will, of course, give iron, and you can vary the preparations from time to time, taking care to give an occasional purgative. I have lately tried in cases of chlorosis and anæmia Bland's pills, recommended by the late Niemeyer, with excellent effects. The following is the formula—

R Ferri sulph. pulv.,
Potas. carb. et tartrat. aa ʒ ss.,
Trajaceanth, q. s. u. f.,
Pill, xvj.

Two to four of these to be taken thrice daily.

If there be dyspepsia and mal-assimilation of food you must treat this:—Nux vomica with the mineral acids in bitters is very useful, and generally pepsine will be a good addition to the treatment.

Local treatment must depend upon the condition of the sore, but should not be solely relied upon. When the disease is spreading there is a development of a cellular growth amidst the fibres of the surrounding cutis, which must be destroyed, whilst at the same time we endeavour by general remedies to remove the tendency to this heteroplastic deposit. The choice of the particular caustic does not so much matter. The acid tritrate of mercury, or potassa fusa, with an equal quantity of water, applied around the edges will answer well, taking care, however, not to cauterize too large a portion at once. Others prefer nitric acid, chloride of zinc, or nitrate of silver, whilst others again favour the potential cautery or the galvano-cautery. After such application as the foregoing, you will generally need to apply soothing remedies, such as lead lotion with opium. When the granulations of the sore have the bluish gray tint already mentioned, a lotion containing the Friar's balsam, with a little carbolic acid, will be found very useful. The erythematous variety usually requires stimulation, and the above will be a good application. The pyroligneous oil of juniper with olive oil is also an excellent stimulant.

When there is a visible tendency to heal, you must be careful to foster the general health and to use such astringent lotions as may be needed (the tannate of glycerine is a good one). You will, however, occasionally need to change your hand, and alternate with mild stimulants.

When the part has cicatrized over it will be well to protect the newly formed tissue from the air by coating it over with collodion for some considerable time.

I would also advise you not too hastily to withdraw the treatment addressed to the constitution, but to continue it even after the disease has been apparently cured, recollecting how apt lupus is to recur.

INTRA UTERINE INJECTIONS.

Dr. Robert Barnes, in an instructive article in the *British Med. Journal* (Jan. 11. 1873) observes that the treatment of morbid conditions of the body of the uterus by intra uterine injections calls for earnest discussion on account of its utility and dangers. Almost every author, he adds, who has written upon the subject refers to cases of accidents attending intra uterine injections ranging from severe pains to shock, collapse, metritis, perimetritis, and death. After referring to a number of cases which illustrate the conditions of danger, he points out the precepts to be attended to to avoid these dangers.

"The great object aimed at," he says, "Is to avoid or lessen the risk of the fluid running along the tubes. This it is sought to attain—1. By securing free dilatation of the cervix uteri before injecting, so that the fluid may readily run back into the vagina. For this purpose the preliminary use of laminaria-tents is advised. 2. By using only graduated quantities of fluids, and injecting very gently and slowly. 3. By using a double canula, so as to secure a return-current. To effect this the more surely, the openings of the canula at the uterine end are made at different levels.

"I have not much faith in the double canula. The end which should serve for the return-current is liable to be choked. The preliminary free dilatation of the cervix, and the use of gentleness in propelling the fluid, should never be omitted; but I do not believe that the observance of these precautions is an absolute guarantee against accidents. It is probable that the mere forcible impact of any fluid striking upon the inner surface of the uterus, especially upon the fundus, may cause severe pain and prostration. Since nothing is gained by forcible injection, this consideration affords additional reason for injecting with all possible gentleness; hence it is well to use injecting-pipes having lateral openings of very fine calibre, so as to, pulverize the liquid.

"I strongly advise not to use injections at all in cases of marked flexion of the uterus. Even if we dilate the cervix first by tents, and maintain the uterus erect during the injection, we cannot always be sure that the flexion will not be reproduced, so as to prevent the issue of the fluid; and it must not be forgotten that it is especially in these cases that the uterine cavity is likely to be enlarged, and the Fallopian tubes dilated.

"The general conclusion at which I have arrived, is to restrict the use of intra uterine injections within the narrowest limits. I rarely employ them now, except in cases of urgent danger from menorrhagia.

"We may obtain almost all the advantages that injections are capable of giving by other means. For example, the same agents which are useful in the form of solutions for injection, may be employed either by swabbing, or solid, or in the form of ointment. Thus, where the use of chromic or nitric acid, or perchloride of iron, or iodine, or bromine is indicated, these agents can be applied soaked on a sponge or piece of cotton, or on a glass or hair pencil, the cervix having previously been well dilated. Nitrate

of silver is far better applied in the solid form: even then it is liable to cause severe colic. The risk of this may be lessened by reducing the caustic, by fusing it with an equal part of nitrate of potash. The ordinary way of using the solid nitrate of silver—that is, by holding a piece of the stick in a forceps or porte-crayon—is objectionable. The piece may fall out or break, and a fragment left behind in the cervix or body of the uterus may give rise to intense agony, and even metritis. To avoid this accident, I have for many years adopted a contrivance I learned from Sir Benjamin Brodie, who armed the ordinary probe by dipping the end into nitrate of silver, fused in a watch-glass over a spirit-lamp. I use special probes of platinum or silver, mounted on handles of convenient length. These probes may be curved to follow the course of the uterine canal. This is far the best way of applying nitrate of silver to the os and cervix uteri; and it is the only safe way of applying it to the interior of the uterine cavity. The armed end of a probe may be passed into the uterus without the speculum, although the aid of this instrument is sometimes convenient. For example, unless the armed probe be protected by a canula, the caustic will first touch the vulva and vagina in its passage, which is apt to leave unpleasant effects, and the guiding finger of the operator will be stained.

"One of the most widely useful topical applications to the mucous membrane of the cervix and body of the uterus is sulphate of zinc. The value of this agent, when applied to the relaxed or morbid mucous membrane of the vagina in the form of injections, is familiarly known; how to apply it to the uterine mucous membrane is, therefore, a matter of great interest. This has been accomplished by Messrs. Johnson, the well-known assayers, on the suggestion of Dr. Braxton Hicks, who prepared small cylindrical sticks of fusate sulphate of zinc weighing three and five grains. These can be carried quite into the uterus without having touched the vagina by the way, by means of a canula, first made on my design by Messrs. Weiss, and now generally sold by instrument-makers. It consists of a silver canula of the size of a No. 8 or 9 catheter, gently curved, open at the end, and supplied with a stylet or piston. The stick of sulphate of zinc or other material is placed in the uterine end of the canula; the instrument is then passed into the uterus just as the uterine-sound is passed, the patient lying on her left side: and the operator's finger, placed on the os uteri, guides the instrument. It is a great advantage of this contrivance, that the use of the speculum is quite unnecessary after it has aided in establishing the diagnosis which supplies the indication in treatment. When the instrument has gone the proper depth, the piston pushes out the stick, and the instrument is withdrawn, leaving the stick to dissolve. This it soon begins to do, and by its speedy effect in constricting the mucous membrane, it keeps itself *in situ* until it is completely dissolved.

"Nitrate of silver, reduced by admixture with nitrate of potash, may be used in the same way; so may persulphate of iron, but this should be consider-

ably reduced. When used nearly pure, I have known it to cause severe colic and bleeding.

"A most precious way of applying astringents, caustics, solvents, or alteratives to the interior of the uterus, is in the form of ointment or pasma. In this way almost any substance can be applied. Where grease is objectionable as a vehicle, a pasma of suitable consistence may be made by aid of glycerine or other matters. In this form we may use substances which cannot easily be applied in any other way. For example, we cannot hardly use bromine, or iodine, or mercury, in a solid shape; and to use them in liquid form is open to the objections already discussed. Almost anything can be made into an ointment or pasma, and thus we get a complete practical command over a large range of useful agents.

"To introduce ointment into the cavity of the uterus, Messrs. Weiss have made from my design a very convenient instrument, also capable of being used like a sound without the speculum. The instrument is easily charged by dipping it into the ointment—a sufficient quantity of which is carried into the uterus, and, by pushing up the piston, is deposited there.

"If it be desired to apply a powerful liquid caustic, as chromic acid or strong bromine, to the interior of the uterus, this can be done by the ointment-carrier. A few shreds of asbestos may be packed in the space between the eyelet-holes and charged with the fluid. On ramming down the piston, the fluid will be squeezed out.

In discussing the action of powerful styptic injections in arresting flooding after labour, the conditions under which the practice I have recommended is indicated have not always been accurately appreciated. The great agent, of course, in stopping hemorrhage, is the constriction of the uterine vessels by the muscular wall in which these vessels run. All the ordinary means of arresting hemorrhage are aimed at producing muscular contraction. But muscular contraction depends on nervous power. Thus cold, grasping the uterus, introducing the hand, galvanism, all depend for their efficacy upon the spinal cord being able to respond to the peripheral call. When, therefore, these means prove sufficient, the inference is *generally* warranted that the case although serious, is not desperate. The condition is very different when the excito-motor function is suspended; when neither by peripheral excitation, nor by centric stimulus, the nerve-force can be drawn or sent from the spinal cord to the uterus in sufficient intensity to cause contraction. At this point, unless the bleeding is arrested by syncope, or by temporary enfeeblement of the circulation, the patient is in the most imminent danger of death. The slightest shock or disturbance will extinguish the flickering spark of life. Under such circumstances I have known death follow, to all appearance immediately, caused by the injection of cold water, or passing the hand into the uterus. If instead of cold water, we inject a solution of perchloride of iron, the same catastrophe may ensue. Is it more likely to ensue? Very careful observations are required before this

question can be answered in the affirmative. People are apt to think that cold water is so simple a thing that it cannot do any harm. But if it cannot do any harm, is it not probable that it is, under the conditions discussed equally powerless to do any good? Harmless remedies, as a rule, fail in great emergencies. Now, cold water fails not because it is harmless, for the shock and depression which it causes are extremely dangerous; but it fails because, nervous power being exhausted, it cannot excite uterine contraction, and it has no other virtue in arresting hemorrhage.

"Here, then, it is that styptics come to the rescue. The emergency is extreme, and would be desperate, but for the new power invoked. If blood be still running, it is instantly seized at the mouths of the vessels, which become sealed by coagula. It also constricts the inner surface of the uterus, and thus further closes the vessels. The system then has time and opportunity to rally, and by and by the contractile power returns. In estimating the relative value, then, of cold water and perchloride of iron, we must reflect that iron acts and saves life, when water is inert or injurious. If occasionally death follows, and is apparently accelerated by the iron injection, we have, on the other hand to remember that it was used as a last resource, when the patient was likely to die even if nothing were done, and that even under these unpromising conditions *many lives, to all appearance doomed, have been saved.*

"The great lesson to learn is to take courage to use the styptic in time, that is, before the vital power has sunk too low. It was not to be expected that a remedy powerful enough to save under the last extremity should be altogether free from danger. But I have seen so many women bleed to death, and have seen so many saved by the timely use of the iron injection, that I am much more afraid of the bleeding than of the remedy.

"In some cases there is reason to believe that the iron enters the uterine vessels. I have known intense pain in the uterus follow immediately on the injection. How is this explained? If blood were present in the vessels, it is a chemical necessity that contact with the iron would cause coagulation. I infer, then, that in some cases the vessels are for a time nearly empty; and that there is a certain amount of suction-action induced by the relaxed state of the uterus, and by the lateral or semiprone position of the patient. I would therefore urge that the patient be placed on her back, and that the uterus be grasped firmly between the two hands of an assistant during the injection.

"In some cases, it is easy to carry a swab of sponge soaked in the iron solution in to the uterus. In this way probably some of the risk attaching to injection is avoided. The persulphate of iron, which is preferred by our American brethren, may have its advantages. Its styptic force is probably greater. It may be used in the form of one part of the liquor ferri persulphatis of the *British Pharmacopœia* to six or eight of water. The proper strength of the perchloride solution is one in ten."

DEATH FROM AN ATTEMPT AT CRIMINAL ABORTION BY THE INTRODUCTION INTO THE ABDOMINAL CAVITY OF A WIRE 1½ INCHES IN LENGTH.

By T. GAILLARD THOMAS, M.D., Prof. of Obstetrics and Diseases of Women and Children, in the College of Physicians and Surgeons, New York.

On the morning of Dec. 20, 1872, I was called to see Mrs. X., æt. 32 years, native of the United States, wife of a physician, and mother of two children. She stated that during her pregnancies she had suffered so much discomfort that she had determined to bear no more children. Her last menstrual period was now overdue ten days, and as she felt sure that she must be pregnant, she had proceeded to produce an abortion upon herself just fifteen hours before my visit, which was made at 10 a.m. On the previous evening she procured a piece of steel or iron wire as long and as large as an ordinary knitting needle. At 7 p.m. she had laid herself upon her bed and passing this wire up the vagina, pushed it, as she thought, very gently into the uterine canal. It passed up with very little effort and created little pain and hemorrhage. As she found it advance she had gone on pushing slowly until the end of the wire was on a level with the vulva. Then she put her finger against it and carried it as far up the vagina as she could. Suddenly it slipped up and disappeared. This alarmed her considerably, for it had been her intention to have withdrawn the wire after its insertion for a sufficient distance to accomplish her purpose. I questioned the patient and her husband very closely, and this story was reiterated in every particular and apparently in such good faith that, although I had not believed a word of it in the beginning, I gave my full credence to it in the end.

I now requested the patient to leave her room, and had the bed, the room, and furniture carefully examined, in the hope that the wire might have slipped out, but it could not be found, and, placing her again in bed, I proceeded to make a physical examination.

The temperature was 98½°, and the pulse 120 to the minute, but this acceleration appeared due to nervous excitement rather than to any pathological development. Examination by vaginal touch revealed a uterus of normal size and presenting none of the signs of pregnancy. The os externum was rather smaller than normal, so that the introduction of a sound into it would have been a matter of some difficulty. In the vaginal wall on the left of the uterus and about half an inch from the utero-vaginal junction, there was an opening into which the tip of the index finger could be passed. Nothing was felt in it, but the introduction of the finger caused a slight flow of blood to occur. The patient was now placed upon the side upon a table before a window, and Sims's speculum introduced. The vagina having been freed from blood, the opening could be clearly seen, and through it I passed Simpson's sound for two or three inches into the peritoneal cavity, and turned it gently around in the hope of striking the

wire. This hope proved delusive, and, as the dilatation of the canal by the sound produced free hemorrhage, I desisted and placed the patient again in bed.

I had noticed, in removing her from the bed to the table, that, whenever she was placed in the sitting posture, she complained of severe, stitching pain in the right side posteriorly just opposite the liver. I now got her to assume this position, and whenever she did so this pain was created to such an extent that she would scream out in great agony and demand her replacement upon the back. There was no cough or difficulty in respiration, and auscultation demonstrated nothing abnormal.

On the next day I saw the patient and found that she had suffered so much during the night that she had been forced to take freely a preparation of morphia which I had left her. She described her suffering as having been paroxysmal, and stated that it had occurred in consequence of her assuming the sitting posture. To test this matter more thoroughly, I persuaded her to sit up when I was present, and instantly a severe pain seized her over the base of the right lung, which lasted for eight or ten minutes.

I examined the lung, and detected a distant friction sound upon full inspiration, while percussion revealed a certain amount of dullness which I attributed to the commencing effusion of fluid. The temperature was now 101½° and the pulse 120.

The patient now complained of considerable pain in the nape of the neck, so that I feared that tetanus was about to develop itself, but this symptom gradually diminished, while that of pain over the base of the right lung steadily increased.

On the evening of the second day the patient appeared so ill, that early on the morning of the third day I got Drs. James L. Brown, Ward, and Walker, to meet me at her house, and carried all the instruments necessary for the operation of gastro-tomy. At this consultation it was decided that the operation was not warrantable for three reasons: the patient had improved since my last visit; even if a wire no longer than a knitting needle had been passed into the peritoneal cavity it was very possible that it would remain there without serious damage after the system of the patient became accustomed to its presence; and lastly, the patient and her husband, brought face to face with a grave surgical procedure, both swerved from their former statement and expressed doubt as to whether the wire had really penetrated the abdominal cavity, or merely punctured the vaginal wall and then be lost in the bedclothes. Some of her friends too were opposed to the operation, and urged upon me that in view of her condition at that time it should be delayed at least until more untoward symptoms developed themselves.

At this time I left New York for Troy, to be absent for ten days. The patient was left in the charge of Dr. Charles S. Ward, with the injunction that if he deemed gastro-tomy at any time advisable he should immediately resort to it. On the very day of my departure a violent attack of pneumonia added itself to the pleurisy already existing, and

rapidly spread over the whole of the right lung. This progressed with only one remarkable development, which showed itself on the 29th of December. Upon the patient's sitting up to cough, a violent effort caused the expulsion by the mouth of a large teacupful of bloody pus. This material she continued to expectorate from that time to the close of her life. On the 4th of January I saw her with Dr. Ward, and predicted her death within twenty-four hours, at about the end of which time it occurred. Upon this visit I found the right lung entirely solidified, the patient constantly expectorating a dark, bloody pus, and the general symptoms all showing that dissolution was rapidly approaching.

On the morning of the 6th of January, about twelve hours after death, an autopsy was made by Dr. Ward in the presence of Dr. Tucker and myself. The appearance was so greatly altered that recognition was difficult. The face and trunk were very much swollen and the lips discolored, although so short time had intervened since death, and the weather was very cold.

The peritoneal cavity being exposed by a long incision, no traces of peritonitis were found to exist in any part. Upon passing the finger deeply down towards the sacro-iliac synchondrosis of the left side, the extremity of a large wire was felt about two inches above the vaginal roof. Following the course of this with the finger, it was found to run deep down below the intestines just over the large vessels on the spine, across the abdomen to the liver; striking the right lobe of this organ upon its lower face without injuring it, it had glanced backwards, to the diaphragm; had penetrated this, and, plunging into the lung, entered its tissue for the distance of two inches. The wire, being seized by its lower extremity and drawn out, was found to measure seventeen and a half inches. It was, apparently, one of the longitudinal wires employed in the manufacture of umbrellas. The right lung was found to be in the third stage of pneumonia, and an abscess had formed in its lowest portion where the wire had penetrated.

This singular case presents several points worthy of consideration. It is surprising that a woman could inflict such serious lesions upon herself with so little pain, and that the lung itself could have been penetrated without the occurrence of hæmoptysis. It is equally surprising that after the infliction of the injury so little constitutional disturbance was excited for so great a length of time as that which intervened between its occurrence and the development of pleurisy. Lastly, it is almost incredible, that one who had practised medicine, was not entirely ignorant of anatomy, and had never developed palpable signs of absolute imbecility, should have stood by while a wife, to whom I have every reason to believe he was sincerely attached, committed so suicidal an act.

But there is a much more important stand-point from which this subject must be viewed, and one from which, in the present state of abdominal surgery, the examiner may well ask for full and explicit answers to the question, "Why was this wire not removed by gastrotomy?"

We are all wise after the elucidation of a fact, and, related as this case here is, it will appear to many that it must have been from its commencement a clear one. In reality, for me, it was, I think, the most perplexing that I ever met with at the bedside. Let me state *seriatim* the reasons which led to the adoption of the course which was pursued.

1st. I was in great doubt as to the truth of the story which was related to me. Criminal abortion is so shockingly common in New York that every practitioner familiar with its prevalence and the unscrupulousness of the miscreants who practise it, is constantly on his guard against being made a shield for the escape of the guilty party. For some time I construed the story which was told me in this way: The parties, I thought, were not husband and wife, but an abortionist and his victim on a visit to a large city to escape the espionage of a smaller community. He had punctured the peritoneum and possibly a loop of intestine, and was anxious to mislead me into the performance of a dangerous operation that would possibly result in death, which was rendered inevitable by his own action. I gave up this view in time, and believed in the story as I have related it, but, out of four physicians who examined the case, I think that I am correct in saying that I stood alone in my credulity.

2d. It was exceedingly doubtful whether the wire which had punctured the roof of the vagina was really in the peritoneal cavity or not. Although this was positively asserted by the patient and her husband at first, when brought to the crucial test of gastrotomy they became vacillating, weak, and uncertain in their statements. Dr. Ward yielded his belief in the presence of the wire only when it was found by him in the autopsy. It may be asked whether pain at the base of the right lung increased by assumption of the sitting posture did not point to its presence? I would answer, No, because a wire only as long as a knitting needle could not possibly extend from the vagina to the lung of the opposite side, and because coincident pleurisy would have explained the symptom.

3rd. Even if a wire as small and no longer than a knitting needle were deposited in the cavity of the peritoneum, it was a doubtful question, so long as no grave symptoms developed themselves, whether it would have been wiser and safer to leave it or to resort to gastrotomy for its removal. This remark does not refer to the wire (17½ inches in length) which was found, but to one the size of a knitting needle, which the patient and her husband constantly declared to have been that which was employed.

4th. Had I for a moment even suspected that so long a wire had been inserted, I would have connected the pain over the lung with puncture of that organ by the foreign substance, and this would have been a corroborative evidence of its presence. Unfortunately the patient and her husband to the end persistently falsified with reference to this point, probably from shame in acknowledging their extreme ignorance, and by so doing led me further from the truth than they did in any other way.

5th. The time for deciding the question of gastro-

tomy virtually passed away in three days. At the end of this time severe and wide-spread pneumonia not only made the propriety of a grave operation questionable, but masked the symptoms which would otherwise have developed in connection with the presence of the wire.—*American Journal of Medical Sciences.*

METHOD OF USING STRYCHNIA IN THE TREATMENT OF OPTIC NERVE ATROPHY AND ALLIED NERVOUS AFFECTIONS.

By JULIAN J. CHISOLM, M.D., Clinical Professor of Eye and Ear Diseases in the University of Maryland, and Surgeon in Charge of the Baltimore Eye and Ear Institute.

It is now nearly two years since I commenced experiments hypodermically with strychnia, for the relief of dimness of vision, in cases of optic nerve atrophy. With the usual timidity of one dealing knowingly with a substance of great potency, I deemed it prudent to commence the series of experiments with doses so small as to be incapable of serious injury to even those whose system may show an idiosyncrasy, a rebellious spirit, against strychnia. Of a solution of the sulphate of strychnia 4 grs. of the salt and distilled water $\mathfrak{z}j$, 3 minims, containing the $\frac{1}{10}$ of a grain, was the amount first introduced under the skin. It was presumed that strychnia would act as did morphia, with which the system seems most readily impressed by the hypodermic administration. In using a solution of the strength indicated it was an easy and safe method of watching the effects of increasing doses, as they could be added to drop by drop, and the increase suspended as soon as any toxic effects should show themselves.

Experience with observation soon showed that the human system rapidly tolerates strychnia, and that a dose which would cause decidedly uncomfortable contraction in the spinal and leg muscles, would after a few repetitions cease to annoy. Through this tolerance it was discovered that in every case the dose could be safely increased to a point far beyond the customary amount administered by general practitioners; even in the cases in which very small doses had in the beginning produced very uncomfortable symptoms. It was also observed that the ordinarily administered dose of from $\frac{1}{60}$ to $\frac{1}{30}$ of a grain of the sulphate of strychnia, which would at first be felt by the patient, when repeated three times a day, was comparatively useless, giving but negatives effects in nerve atrophy, on account of the smallness of the dose. This small quantity causes no appreciable stimulation.

My experience led me to the conclusion that to obtain all the good that strychnia could produce, it was necessary to keep the system under the full physiological effects of the remedy by administering a dose as large as the patient could bear comfortably, and that a smaller dose would not answer. I also observed that when the tolerance of the remedy was fairly established very few patients could take more than one-half of a grain of the sulphate of strychnia daily, but that this quantity could be well borne by most persons. Under these doses there seemed to be

a constant excitation sustained to the permanent benefit of the patient.

When it was found that strychnia could be introduced under the skin in doses so much larger than those ordinarily administered, an effort was made to create an impression that similar doses could not be taken into the stomach with the same impunity, and that strychnia differed from all other remedies hypodermically used. These, as we well know, are more active when hypodermically used, and consequently must be more guardedly given by the skin injection.

To test this important point I alternated with the same patient, dose with dose, giving at one time hypodermically, and at another by the mouth, a similar quantity from the same bottle. I found that the same quantity when injected would act a little more promptly than when administered by the mouth, but that, except the difference in time, a few minutes only, there was no other appreciable difference in the effects. I, however, discovered that a similar dose was not equally borne at all times of day. A larger dose could be taken after eating than after fasting; in the one case, the medicine commingling with the food, absorption must be slow and gradual; whilst the whole amount dissolved in a little water, when brought in contact with the walls of the empty stomach, would be much more rapidly taken up. I also observed that the dose in the morning may be larger than that at mid-day, and this again than the dose of the evening; that is to say, that when the system tolerates one-fifth of a grain of the sulphate of strychnia after breakfast, followed by very little, if any, stiffening of the limbs, the same dose when repeated after dinner will be followed by a great deal more bracing of the muscles, and when repeated after tea for the third time during the day, it is very apt to bring on a very uncomfortable tetanic condition, which may last for one or two hours.

An explanation for these phenomena is sought for in the cumulative effects of the drug. It enters the system with much greater rapidity than it can be gotten rid of, its elimination being slow. When one-fifth of a grain of the sulphate of strychnia is taken after breakfast, the blood soon becomes charged with the salt, and in from twenty to sixty minutes the whole dose seems to have been taken into the circulation, affecting the nerve centres with the greatest force. The eliminating organs commence at once their work of straining it out of the circulation, and in a couple of hours, provided the dose be not toxic, a certain amount of the remedy is gotten rid of, which so fast reduces the dose as to remove the disagreeable effects, but a quantity of the drug still remains in the blood, and the process of elimination is still to go on. When the after-dinner dose is taken, there is still some of the previous dose not yet eliminated from the circulation. To this the dose rapidly absorbed is soon added, making in this way a larger dose than the one believed to have been administered, and with therefore increased effects. Now, when the third dose is taken after supper, the cumulative effects of this entire dose, with possibly one-half of the dinner portion still in the circulation, impresses the nerve centres to such a decided extent

as to produce the very distressing, although transient, spasms of the back and leg muscles. By morning again, fully twelve hours having elapsed, the eliminating organs, incessantly at work, have had time to expel from the system the entire amount received into the circulation of the preceding day. Therefore the large dose is again well borne at breakfast time, the evening dose repeating the discomfiture of the preceding day.

Finding by a very large experience that large doses of strychnia are required to effect beneficially the system in cases of deficiency in nerve action, and that a large dose when taken by the mouth will produce the identical, immediate, and final results, as when taken under the skin, I have abandoned the hypodermic use of the remedy, inasmuch as the sticking with the small canulated trocar was not a pleasant anticipation, and would become from day to day more annoying, especially when kept up for months.

The intense bitterness of the strychnia which remains in the mouth for a long time after it is taken, can be avoided by giving the remedy in pill form, especially in sugar-coated granules. These I have frequently tested by comparing their effects with a liquid solution of the salt, accurately measured in a minim glass. I find them strikingly similar.

When strychnia is given in large doses in solution, it is not safe to trust to the teaspoon measure as used in different households. Many teaspoons will hold nearly two drachms, instead of one drachm in which the proper dose of the remedy has been dissolved. Very dangerous effects might ensue when the physician is prescribing one-fifth of a grain of strychnia to the drachm, and the patient has administered to him over one-third of a grain to the teaspoonful. Hence I find the sugar-coated granules of fixed proportions a much safer means of administration. Again, if a patient with defective vision has to measure his own dose of this strong solution, there will be much less responsibility in trusting him to count pills than to measure a teaspoonful of a liquid preparation.

I have, for some months, restricted the administration of strychnia to the use of sugar-coated strychnia granules, as carefully prepared by Bullock & Crenshaw, or by Warner & Co., and others. I use granules of $\frac{3}{16}$, $\frac{2}{16}$, $\frac{1}{16}$, $\frac{1}{16}$ a grain of strychnia each. With these combinations I can with every caution gradually increase the dose from day to day. I usually commence with a $\frac{3}{16}$ of a grain granule, to be given three times a day, after meals. I commence with this small dose to guard against idiosyncrasies. If no discomfort follows upon their administration, after a few days, the strength of the dose is increased by substituting a pill of $\frac{2}{16}$ of a grain each. When these are well borne, granules of $\frac{1}{16}$ of a grain are prescribed; and in a short period, often in from ten to fifteen days granules of $\frac{1}{16}$ of a grain of strychnia can be safely taken. The next increase made is to give two granules of $\frac{1}{16}$ grain each, which will be equivalent to $\frac{1}{8}$ of a grain; and, finally, two granules of $\frac{1}{16}$ of a grain each, can be administered as a dose. When these heavy doses are being used, I find it expedient to make the night dose light. For instance, when

two of the $\frac{1}{16}$ or $\frac{1}{8}$ granules can be taken after breakfast, and even after dinner, with comfort, the patient avoids the annoying effects of an overcharged circulation with strychnia, by taking only one pill at bedtime. By this arrangement he takes the $\frac{1}{2}$ grain of strychnia per day, which, according to my experience, is the dose that produces the best remedial effects. When these large doses have secured a tolerance in the system, they may be safely continued for months, or as long as they seem to benefit, and may be still further increased should they cease to excite the nerve centres. Whatever good accrues during the administration of the strychnia will be permanently retained. In no instance, as far as my experience extends, have I found the improvement lost when the use of the strychnia is discontinued.—*American Journal of Medical Sciences*, April, 1873.

INFLAMMATION OF THE OVARY.

By CHARLES R. DRYSDALE, M.D., M.R.C.P.L., F.R.C.S.E.

The ovary in the female, like the testes in the male, is the essential part of the genital apparatus. We should, indeed, speak of the *ovary and its appendages*, instead of the uterus and its appendages. There can be little doubt that inflammations of the uterus often are but secondary, and that inflammations of the tubes and ovaries are the active cause of disorders in the female pelvis. Anatomically, we may speak of folliculitis, parynchymatous, or peritoneal ovaritis; but in practice this way of speaking is valueless. Authors, and among others Chéreau ("Mem. Mal. d'Ovaires," Paris, 1844) speak of degrees in the anatomical ulcerations found in acute ovaritis. Firstly, there is slight increase in size of the organ, with a vague feeling of fluctuation, the tissue being redder than normal, and softened. Secondly, the organ may be twice, thrice, or four times its ordinary volume, rounded, oval or flattened, with soft, friable tissue, infiltrated with a yellowish or violet-coloured serosity, with small effusion of blood into it. Thirdly, we may have abscess. And, lastly, grey softening or putrid destruction of the organ, which is turned entirely into a bleeding mass, greyish and of various hues, almost diffuent. Acute ovaritis, as well as chronic ovaritis, are very frequently double. The Fallopian tube in such cases contracts adhesions to the ovary very frequently, and pelvic peritonitis is a very common accompaniment of it. The ovary in chronic ovaritis becomes lengthened, and has a very short pedicle. The tumour is irregular, and with protuberances on its surface; it is composed of a reddish tissue or of yellowish red hue, containing much cellular tissue, amidst which there are little follicular cavities filled with blood or serosity. In the worst cases the whole ovary is composed of condensed cellular tissue. It is rare that uterine catarrh is absent in such cases. The puerperal condition is one of the commonest causes of ovaritis; and in two-thirds of the cases met with, it occurs after abortion, painful labour, or obstetrical operations. Ovaritis, however, is common enough in women who have not borne children, and Bernutz thinks that ovaritis occurs as frequently in women affected with gonorrhœa as it does in men. Dysen-

tery may cause ovaritis. The symptoms of acute ovaritis are often well marked. There is fever, nausea, and vomiting, with acute pain in the iliac fossa, frequent desire to micturate, constipation, and pain in defæcation. The thigh is flexed on the abdomen. In slighter cases the symptoms are less marked. It is very rare indeed that any tumour can be perceived in the inguinal region; but a small tumour may sometimes be discovered in examination per vaginam. Examination by the rectum, however, gives the most information. Ovaritis may terminate by resolution, but it is apt to recur when the next menstrual epoch appears. It is apt, too, to remain augmented in volume and adherent to other pelvic organs. Suppuration is announced by pain, sweating, and shivering fits, but is sometimes latent, although hectic is frequent. The pus opens sometimes in the vagina, rectum, or peritoneum, and but rarely into the uterus. In chronic ovaritis, diminution of the menstrual flow is common, although amenorrhœa is rare.

The various kinds of ovaritis may be thus spoken of. Common ovaritis, of catarrhal or inflammatory origin; puerperal, or gonorrhœal, rheumatic, tubercular, variolic, and syphilitic. As to rheumatism, this seems a likely enough cause of ovaritis, and the author has recognised it in one or two cases of acute rheumatism. In forty-five cases of tuberculation of the female genitals it was found that the ovary was attacked four times (Bruardel, cited by Mauriac, West's Lectures, p. 395), and with the tubes seven times, so that tuberculosis of the ovary rarely occurs alone. The tubercles in such cases soften and become converted into tubercular abscesses. In variola we find ovaritis, as well as orchitis. In cases of fatal variola we find sometimes adhesions of the fringes of the tubes to the ovary, the mucous membrane of the uterus and Fallopian tube red, thickened, and swollen, the ovaries greatly injected on the surface, enlarged, red, friable, and infiltrated with serous liquid, with the peritoneal coat inflamed. Syphilitic ovaritis was admitted by Nélaton (Anat. Chir.), Lancereaux ("Traité de la Syph.") speaks of two anatomical forms of the latter affection, *diffuse* and *circumscribed*, the first being marked by augmentation of the volume of the ovary, through proliferation of its connective tissues, the second by gummy tumours deposited in its stroma. Anaphrodisia and sterility are spoken of in such cases, but no conclusive cases have been published, although the author is convinced that he has had such cases under notice in private practice. Lancereaux speaks of two tumours in the inguinal region disappearing under iodide of potassium used for twenty days.

Inflammation of the Fallopian tube exists rarely, except when there is ovaritis or pelvic peritonitis along with it; but it occasionally does, in which cases the walls are found thickened and softened, and of a dark red colour. The canal becomes tortuous. The mucous membrane, which lines it, is swollen, and covered with a yellowish white liquid, with false membrane sometimes; it is distended by mucus or pus. The fimbriæ thickened, reddened, and swollen, are almost always glued by morbid adhesions to the neighbouring organs, generally to the

ovary or to the uterus, and more rarely to the walls of the pelvis. It is very rare that the diseased products contained in the tubes seem to pour into the peritoneal cavity; but uterine mucous membrane is almost constantly inflamed when the tubes are so. Dropsy of the tubes occurs not unfrequently, not always, however, from inflammation. The same causes that produce ovaritis are here in action. As to tube-ovaritis, this is a conjunction frequently enough noticed. The inflammation of the lining membrane of the uterus is one of the most common causes; but they often arise independently of such uterine inflammation.

With regard to the pain which is said by many authors to be symptomatic of chronic ovaritis, Dr. West (Translation of lectures, p. 548) says he cannot share the opinion of those who believe that almost all the diseases of women are produced by inflammation of the cervix uteri; but he also cannot attribute them to inflammation of the ovaries, and he believes, in nineteen times out of twenty where the ovarian regions are the seat of a deep-seated pain, there exists no actual affection of the ovaries. Dr. Mauriac in a note to this part of Dr. West's work, thinks, however, that the nerves of the ovaries become the conductors of a morbid impression which is elaborated in the grey cells of the cord, under the influence of a primitive impression excited by an organic lesion in the ovaries. The pains here are reflex, and similar to those noticed in orchitis in the male (*Gaz. Med. de Paris*, 69 and 70). Treatment of such pain is simple enough. Hot fomentations or aconite linament applied on the inguinal regions, together with ethereal draughts, may be prescribed with advantage, and chloral hydrate in syrup of peppermint in ten or twenty-grain doses. Quinine may also be tried. Sometimes the existence of chronic ovaritis makes sexual congress too painful to be persisted in. In such cases rest and the application of leeches to the mouth of the uterus are indicated.—*Dublin Medical Press.*

BLISTER-TREATMENT OF RHEUMATISM.

Dr. Thomas B. Peacock, Senior Physician to St. Thomas's Hospital, states (*Brit. Med. Journ.*, Jan. 18th, 1873), that he has employed this treatment regularly since 1865. At first he used it only tentatively, "one, two, or three blisters being applied at the same time or in succession, and in conjunction with other remedial means, and the general impression which I formed was not very favourable. Subsequently, I was induced to apply the blisters much more freely, three or four, or even six, at a time, and in rapid succession a still larger number, and I have been led to form a high opinion of their usefulness when thus used, and to confirm what has been said in favour of the treatment by Dr. Davies. The blisters are generally two or three inches wide, and sufficiently long to encircle the limb. They are placed above the chief joints that are affected, and are usually put on in the after part of the day; in the morning, or when they have risen sufficiently, the serum is let out and the surfaces covered with warm linseed-meal poultices, and these are continued for

several days. The treatment has been objected to as unnecessarily severe and attended with much suffering to the patient, but this is not correct. I scarcely remember an instance in which the patient, though specially questioned on the subject, has found fault with the treatment; and I have often heard them say that the pain caused by the blister is not to be compared with that of the rheumatism. Nor have I ever seen any serious inconvenience of any other kind caused by the blisters. Sometimes, however, there is a temporary increase of suffering when the blisters begin to draw, and the temperature rises and the patients are restless at night; but generally there is very marked amendment in the morning, both the swelling, tenderness, and pain being reduced, and the constitutional disturbance relieved. In some cases, however, the local symptoms may not be immediately benefited to any marked degree, and the blisters must be repeated, being applied above to the seat of the first vesication; or, after a few days' cessation, the same joint may be again affected, and in this case too the blistering must be repeated. The occurrence of second attacks in the joints first affected is not, however, by any means confined to cases treated by blisters, but equally occurs when constitutional means have been had recourse to.

"Generally with the local means, constitutional remedies, especially the bicarbonate and nitrate or tartrate of potash are given more or less freely according to the severity of the symptoms. The cases in which I have employed the blister-treatment are the following:—

"First, when several joints are coincidently and severely affected, the sufferings of the patient are great, the constitutional disturbance severe, and the temperature high; in cases of this kind three, four, or even six or more blisters are applied immediately the patient is seen, and as many more may be put on in the course of a few days in rapid succession as other joints are involved, or when those first blistered are not materially relieved or again become affected. From this treatment I have seen the most satisfactory results, both the local and general symptoms being greatly relieved by the free blistering, and the duration of the disease being curtailed. It is evident also that, if the active stage of the disease be shortened, as this is the period during which the internal complications are most apt to occur, the frequency of such complications will be lessened. It is in cases of this kind that the blister-treatment is most efficacious, the benefit obtained being apparently directly proportionate to the number of joints coincidently affected, to the severity of the local symptoms, and to the freedom with which the blisters are applied to the whole of the part involved, so that an immediate and decided impression is produced upon the disease. . . .

"Secondly, I have known very satisfactory results from the blister-treatment in cases in which the symptoms, both constitutional and local, were less severe, but where the patient's strength was greatly reduced either from previous attacks of rheumatism or other cause, or when the heart was already seriously diseased. In cases of this kind, the use of reme-

dies with exercise any depressing influence is to be avoided if possible. I have, therefore, sometimes relied on the blister-treatment alone, or in combination with tonics—quinia and iron—and with very good results. The blisters, even though freely applied, do not depress the strength so much as the use of alkalies or other constitutional remedies. . . .

"Thirdly, another class of cases, in which the rheumatic affection rather involves the smaller joints—what is often called rheumatic gout—and in which the constitutional disturbance is of a more subacute character, is also very often benefited by the use of blisters, though less decidedly than the two other forms of disease. In cases of this kind the blisters need not, however, be employed so freely as in the former cases; I also generally combine them with the internal administration of small doses of iodide of potassium, bicarbonate of potash, and colchicum, and often with bark or quinia. . . .

"Lastly, there are cases in which the disease rather assumes the neuralgic than the ordinary rheumatic form, where the pains follow the course of certain nerves, and are often very persistent, in which the application of blisters is very beneficial."

In this fact class the blisters are to be applied along the course of the nerves.

BELLADONNA IN OPIUM POISONING.

I was summoned to see a child, aged thirteen months, the father telling me it was poisoned, and encouraging me by stating that if I did not hurry, it would be dead when I got there. On my arrival, I was shown an ounce bottle labelled "laudanum," the mother informing me that she had had it filled in the evening, and had administered three drops for a diarrhoea, with which the child was troubled. Leaving the bottle unstoppered, standing upon the table, she went into an adjoining room for a moment, and when she returned, an older child was holding the vial in one hand and a teacup in the other, innocently saying that he had been giving "Sissy" her medicine. There had been none spilled on the table or floor, and as there was only two drachms remaining in the bottle, the child must have gotten about six drachms of the tincture of opium. This had happened three hours previously, that time having elapsed before a physician could be found to visit it.

I found the child perfectly comatose, pupils contracted, respiration slow, interrupted, and stertorous; pulse slow, feeble, and scarcely perceptible; skin cool and clammy; extremities cold; countenance pallid; in fact, all the symptoms of approaching death were present.

I at once gave an emetic dose of ipecac, and it failing to act, I administered fifteen grains sulph. zinc, at the same time pouring a stream of cold water upon the back of the head, hoping thereby to aid the action of the emetic, but failed to produce any effect. Aro. spts. ammonia was given every few minutes, and strong coffee injected into the rectum, all to no purpose. I then had two vessels filled, the one with ice-cold and the other with hot water, and

immersed the whole body of the child, first in one, then in the other. This had the effect of momentarily arousing it, the child uttering a faint cry. This treatment was continued for more than an hour, toward the last with no effect. Artificial respiration was then resorted to, and kept up for some time.

Believing that the little patient would inevitably die unless soon relieved, I determined to try belladonna, having shortly before that time seen articles in several medical journals, going to show the antagonistic action existing between opium and belladonna. Fifteen drops of the tincture of belladonna were given, and repeated in fifteen minutes; still no effect. In ten minutes gave same dose, and soon thereafter could notice the characteristic action of the belladonna in dilating the pupils. From that time onward it was kept up in smaller doses, and longer intervals. After the administration of the fourth dose, the child's condition perceptibly improved.

I should add, that during all this time the child was kept in constant motion; flagellation, and every means I could think of being employed to arouse it.

The recovery was gradual, and unmarked by anything particular, save the extreme prostration, which was overcome by the free use of brandy. No injurious effects were perceptible from the use of the tincture of belladonna, of which two drachms were used in the course of four hours.—DR. MATTHEW L. ALEXANDER, in the *Nashville Jour. of Medicine*.

TREATMENT OF STRUMOUS OPHTHALMIA.

Mr. Henry Power, Senior Ophthalmic Surgeon to St. Bartholomew's Hospital, finds that general treatment is by no means sufficient to cure the patient, and amongst the many local remedies he has used he gives the palm to atropia, in a two or four grain solution, Pagenstecher's yellow ointment, and calomel. With one or the other of these most cases, he says, may be cured.

Cases, however, occasionally occur, in which all these plans of treatment fail; and the question comes, what must now be tried? It is then that I claim attention to the value of extract of belladonna given internally. I have repeatedly found that it rapidly diminishes the intolerance of light, and by its power of relieving the spasm of the muscles closing the lids, enables the child to obtain an amount of benefit from air and exercise that was previously impossible. I can entertain no doubt that its good effects are attributable to its action as a stimulant upon the sympathetic system of nerves, and through this upon the smaller vessels. It is further of use in doing away with the necessity for purgatives, as even in small quantities it acts efficiently in clearing the bowels. I have usually prescribed it in doses of one-eighth to one-quarter of a grain. It is perhaps scarcely necessary to add that, as it is a potent remedy, its effects must be watched, and its administrations should be suspended as soon as the child complains of thirst, or when the rapidity of the pulse is observed to be increasing. I have only noticed these symptoms in one or two instances. I have also found the extract

of belladonna serviceable in cases where the affection was rather a limited keratitis than phlyctenular ophthalmia; that is, in which a small segment of the cornea was hazy and vascular near the margin, even though the intolerance of light may not have been very intense. I consider the seton, though recommended by so good an authority as Mr. Bader, a *pisaller*; and find the treatment mentioned by Dr. Swanzy as practised by Von Grave, though it was originally suggested by Jungken, of dipping the whole head for a few seconds in cold water, not persistent in its effects—*The Practitioner*, Oct., 1872.

PUNCTURE OF THE BLADDER ABOVE THE PUBES.

Dr. James I. Little records (*New York Med. Journ.*, Nov., 1872) a case of retention of urine from enlarged prostate, in which he punctured the bladder fourteen times with a capillary aspirator. Subsequently a catheter could be introduced by the urethra. "No tenderness followed the punctures, and in a few days all traces of them had disappeared. The patient at last accounts was passing the greater portion of his urine without the catheter. No cystitis had taken place. During the time the aspirator was being used, he was free from all constitutional disturbance.

Dr. L. suggests the following rules for this operation:—

"1. The patient should lie on his back, and, if the bladder is not much distended, the operation will be facilitated by slightly elevating the patient's hips by means of a pillow placed beneath them.

"2. The punctures should be made on or near the median line, from one inch to one inch and a half above the pubes, and should be made each time in a different place. In the case described, the punctures were about a line apart and extended over an area about half an inch in diameter. Mr. Watelet recommends the No. 2 capillary trocar, but, in cases where cystitis exists and the urine is loaded with pus, mucus, or the phosphates, one of the larger trocars may be used with safety.

"3. The bladder may, when necessary, be washed out by filling the cylinder with water from the basin, and reversing the action of the instrument without withdrawing the trocar from the bladder."

Another case of retention of urine from enlarged prostate is recorded (*Med. Record*, June 1, 1872) by Dr. H. K. Clark, of Geneva, in which six or seven punctures were made above the pubes with a trocar and cannula *one-twelfth* of an inch in diameter. Each puncture was made without regard to the point of previous punctures, and the cannula withdrawn as soon as the bladder was emptied. No unpleasant effect followed these operations.

TREATMENT OF SYPHILIS BY HYPODERMIC INJECTION OF CALOMEL.

Drs. Pirochi and Porlezza have contributed a very important paper on the above to the *Giornale Italiano delle Malattie Veneree*. The authors have recorded fifty-five cases in which they made use of

calomel in subcutaneous injections, and they thus sum up the conclusions to which they have arrived:

1. Recurrence of the disease is less frequent with subcutaneous than with internal treatment.
2. Calomel is preferable to the sublimate and other salts of mercury which have been tried until now, on account of the less gravity and frequency of local and general accidents.
3. Injections with calomel should be performed on the external and central surface of the arm.
4. The syringe should be introduced with precision into the subcutaneous cellular tissue, and care should be taken that the point be not fixed into the thickness of the derm.
5. The best vehicle for the calomel is hydrate of gum-arabic.
6. The quantity of calomel used must vary between ten and twenty centigrammes (about two to four grains).
7. Painting with collodion is very effective.
8. There should be an interval of at least ten days between every two injections.
9. The injections should be discontinued if the first two produce little or no amendment.—*Lancet*, Nov. 23, 1872.

GLEET TREATED WITH MEDICATED BOUGIES.

G. Lorey gives the result of eighty cases of gonorrhœa and gleet treated by this means. The cases of gleet, twenty in number, were all cured in a short time; the longest course included twenty-two bougies, one a day, and the shortest three bougies, the average being nine. The author observes that these cases, being treated in a hospital, doubtless derived benefit from the regular life there; it is not uncommon for a gleet to be greatly exacerbated by a long walk, slight excess in drinking, or a single act of coition. The bougies used were seven and a quarter inches long—i. e., about the length of the urethra—and from one-eighth to one-sixth of an inch in diameter. The centre was of gelatine, the outside of gum-arabic mixed with the medicine, three-fourths of a grain each of sulphate of zinc and belladonna. After being dipped in cold water, they are easily inserted. In the sixty cases of gonorrhœa, no such startling results followed. The bougies served as well as the ordinary injections to cut short the disease—no better. But for two of the incidents of gonorrhœa, pain in making water and nocturnal erections, bougies medicated with opium (three-fourths grain), or opium and belladonna (aa, three-fourths grain), acted admirably. Put in at night, they insure comfortable rest and easy micturition in the morning. It has been urged that, like permanent bougies, they might produce orchitis; but they are dissolved in the course of an hour and a half; and no orchitis occurred in any of the eighty cases observed by M. Lorey.—*Annales de Dermatologie et de Syphilographie*, November, 1872.

DILATATION OF THE ANUS AND RECTUM.

Prof. G. Simon has, in *Archiv. fur Klinische Chirurgie*, a paper on this subject, in which he recommends carrying the process to an extent which is at least not common; that is, not only for surgical operations, but also for examinations of the abdo-

minal viscera, he forces the whole hand into the rectum. By this means one is able to get behind and above the uterus, and detect tumors the size of cherry-stones, to examine the ovaries, and, in men, to determine accurately the condition of the bladder, and ascertain the existence of calculi, their volume and number. In fact, one can explore, not only the rectum, and part of the sigmoid flexure, but the anterior wall of the abdomen, the mesenteric glands, the lower part of the kidneys, and, indeed, all the viscera in the lower two-thirds of the abdomen. The operation facilitates also the removal of foreign bodies from the rectum, favors the cure of ulcers by allowing a free escape to the morbid products, and, in case of fistulæ, may be followed by the use of Sims's speculum, making surgical procedures much easier than when performed through any of the common anal specula. Claiming all these advantages for the process of forcible dilatation, he declares that it produces no injury to the structures acted on. In some cases he incises the sphincter ani, in some cases merely distends it. Under the influence of chloroform the rectum of an adult, if there is no contraction of the pelvis, may be so enlarged as to admit gradually the hand and part of the forearm, permitting the fingers to be introduced into the sigmoid flexure; and this but rarely causes a slight tearing of the anus. Where the anus is particularly unyielding, or when it is necessary for surgical operations, lateral incisions may be made near the raphe, or at the sides of the coccyx.—*Gazette Hebdomadaire*, January.

EXTERNAL USE OF TURPENTINE IN THE TREATMENT OF TONSILITIS.

In the *Leavenworth Med. Herald* (April, 1873), Dr. S. H. Roberts strongly recommends the use of turpentine externally in tonsillitis. He folds flannel to four thicknesses, wrings it out in hot water, and pours oil of turpentine over a spot the size of a silver dollar. The flannel is then applied over the subparotid region, and the fomentation continued as long as it can be borne. After removal a dry flannel is applied, and the same region rubbed with turpentine every two hours. This application is continued daily till resolution occurs. The doctor believes, from the evidence of his long experience, that thus applied early in the disease the oil of turpentine has almost a specific effect in tonsillitis. That its action is not simply that of an irritant, he has proved, by employing mustard, croton oil, tr. iodine, etc., in the same class of cases. They always failed to diminish the inflammation of tonsils, while the turpentine succeeded.

SALICIN IN OBSTINATE DIARRHŒA.

Dr. I B Mattison, writing in the *Phil. Med. and Surg. Reporter*, recommends in cases of diarrhœa which prove utterly rebellious to ordinary treatment, salicin in powder or pilular form, to children preferable the former, in any appropriate vehicle, in doses,

under two years of age, of one-half grain every four hours, and to adults after the following formula :

R Salicin, 3j.;

Fiat pill, No. 24.;

Sig. two pills every four hours.

"Its employment," he says, "is followed, after a short time, by a decrease in frequency of the evacuations, a return to their normal colour and consistence, and subsequent restoration to entire health."

CURE FOR CORNS.

Bathe the feet well in warm water, then with a sharp instrument pare off as much of the corn as can be done without pain or causing it to bleed, and dress once a day with the following salve :

R Black oxide of copper, gr. xv.

Lard, $\frac{3}{4}$ ss. M.

COLLODION IN ERYSIPELAS.

M. Broca recommends the application of collodion in cases of erysipelas, in the following manner : a layer of collodion should be applied around the margin of the erysipelatous blush for a distance of three inches, and also over the affected part. The object of the former is to exercise a cicular compression, so as to separate the affected part from the rest of the cutaneous surface. It is necessary to examine these layers once or twice daily, and to repair the fissures which occur. The collodion used must be free from oil. It is rare to see the erysipelas spread after these applications, under which it is in a short time extinguished.—*Edinburgh Medical Journal.*

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MONTREAL GENERAL HOSPITAL.

In the May number of the *Record*, we mentioned that we had received a letter, signed "*Junior Practitioner*," stating that the Committee of Management of the Montreal General Hospital, had lately discussed the propriety of increasing the Medical Staff of the Institution, as well as the propriety of some of its older members retiring on the Consulting Staff; that at a conference held between the Hospital Board and its medical staff, the latter unanimously opposed the proposed change, the result being that, for the present,

the matter had been allowed to drop. Although we presumed that upon all medical matters, in Montreal, we were tolerably well informed, we were obliged to confess that the information given by our correspondent, was news to us. Since then we have heard the details of the interview between the Hospital Committee and the Medical Staff, and we confess not a little surprise at the arguments used to upset some of the means proposed by the Board of Management for increasing the hospitals efficiency. We could understand opposition to the retiring of some of the older members of the staff, for it has not been customary in the history of the institution, and it was too much, we confess, to have expected them to graciously acquiesce in a compulsory retirement. Upon this point it might perhaps have been advisable for a time, to use 'moral suasion'; to have had a distinct expression of opinion from the Governing Body of the Institution, that, after a certain term of service, attending physicians should be promoted to the Consulting Staff, rather than come boldly forward with an almost direct request that certain members should retire. Human nature, in spite of all the restraints which may surround it, will kick when kicked, and it is therefore no matter of surprise to know that this point was strongly opposed. If, after a time, however, the hint was not acted upon, then the remedy would be entirely in the Committee's own hands. Candour, however, compels us to say that, while we believe that, as a general rule, a physician or surgeon should retire upon the Consulting Staff after twenty-five years active work, we hold strongly to the opinion that exemption should be made in favor of those engaged in clinical teaching. To be able to impart information at the bedside, to work out cases, so as to make the more important points impress themselves on one's memory, is not a gift given to every medical man. At a time, therefore, when a clinical teacher would be most valuable, he should not be compelled to retire. It may be said that this argument is equally applicable to the plain attending physician. We, however, do not think that it is; for the clinical teacher, if compelled to retire, could not make his experience at all available to his successor, while the physician retiring upon the Consulting Staff, is at all times at call to assist in all difficult cases and dangerous operations. Still, as we have already said, this point is one quite capable of discussion, and in the way brought forward, that it excited unanimous opposition does not surprise us. With regard to the proposed increase of the staff, especially that portion intended to have the charge of the outdoor department, under the name

of assistant physicians, we do confess that we are a good deal surprised, not only at the unanimous opposition which it received, but at the reasons assigned, why the suggestion should not be carried out. One of the staff was egotistical enough to say that the Medical Board should not be increased, because the public went there expecting to get the very best advice. Upon which, a member of the Committee asked him, if he really thought that the entire medical talent of the City of Montreal was embraced in the staff of the Montreal General Hospital. A good many similar arguments were used, and the result has been that although the Committee of Management—the majority at least we are informed remain still of the opinion that the interests of the institution would be served by adding a staff of assistant physicians to attend to out-patients—they for the present waive it, in deference to the unanimous opposition of its Medical Board. We have not alluded to the school argument mentioned by our correspondent, because its transparency, as illustrated at the last election, is surely signing its death warrant. We confess to a degree of sadness, when we contemplate this action of the Hospital Staff; placing them, as it certainly does, entirely antagonistic to the wishes of the majority of the English-speaking members of the profession in Montreal. We venture to affirm that this point of an outdoor staff to the General Hospital, has been very generally discussed by the profession, and its necessity is universally admitted. The eagerness with which such appointment would be sought for, can be judged, when we mention the fact that, at a recent election for physician to the Montreal Dispensary, so keen was the canvas, that thirty governors attended the meeting. If an institution like the Dispensary, quiet and but comparatively little known, could induce such emulation, how much more likely would interest and enthusiasm attach to appointments as outdoor physicians to a large general hospital. In similar institutions in other cities, there is not this exclusiveness shown; for instance, we have at this moment before us the last annual report of the Massachusetts General Hospital of Boston. This hospital, both as regards the number of its indoor patients, and outdoor patients, is a perfectly fair one for comparison. What, then, do we find. That there is a staff for the indoor patients of six surgeons and six physicians. For the out-patients there are three surgeons and the same number of physicians, while in this department there are three physicians for special diseases. Again, this action of the General Hospital Medical Staff is unfair upon another ground. Every member of that Board,

save one, is a professor in the same medical school, and nearly every young medical man practising in Montreal, is a graduate of that school. Yet, when a fair and legitimate field is about to be opened to them, in which to increase their knowledge of disease, their late teachers rush forward, shut the door in their face, and as this moment it is locked to them. We ask is this fair, is it just, is it generous; is this the way the honied words and warm congratulations of graduation day are to be interpreted. Is this the way "our late professors" are "watching over us," and rejoicing in our success, and even willing to extend to us a helping hand. If it is—farewell—to any bond of sympathy—such as should ever exist between teachers and late pupils, and a reluctant acceptance of the fact that, once beyond the portals of your *alma mater*, the sooner you realize the fact—that she has already begun to forget you—the better for your own peace of mind, the better for your independence of character.

We are not sufficiently versed in the early history of the hospital to know whether those who composed the staff, when it only consisted of four members, as stoutly opposed its increase to its present size of eight, as does the present staff any further addition to their number. If they did, we would recommend to the present Medical Board the lessons of the past; for, just as certainly as an increase was demanded and obtained some thirty years ago, so surely is another increase demanded now. Why, then, not grant it graciously, and not be compelled to surrender. The change has got to be made, and that before very long.

A NEW HOSPITAL IN MONTREAL.

We understand that there is every probability of the hospital accommodation of the Metropolis of Canada being very shortly increased by the erection of a new General Hospital, in the western section of the city. The rapid extension of Montreal westward within the last ten years, with the large increase in the number of manufactories in the same section, has several times suggested the advisability of such an undertaking, but till the present spring no definite action was taken. The fact, however, that the nearest hospital was nearly two miles distant, from the majority of the large factories, necessitating the conveying of persons, accidentally injured over that distance, powerfully impressed a philanthropic gentleman, who has nobly subscribed the sum of twelve thousand dollars, and more if necessary, for the wing of an hospital, provided land was procured for that

purpose in the western portion of the city. This offer has been accepted by several well known citizens, and although nothing approaching a canvas has been made, a considerable sum of money has been obtained, one gentleman subscribing five thousand dollars, another one thousand, and several five hundred dollars. Indeed the cordiality with which the scheme has been received by those who have been called upon, augurs well for its complete success. At the present moment negotiations to acquire a considerable portion of land for its erection, are in progress, and its promoters confidently hope that the foundation stone will be laid this summer. We look upon this movement as a good one, and not at all antagonistic to the work being performed by the Montreal General Hospital. The fact that its promoters are governors of that institution is sufficient to prove this. There is ample field for both, and aside from the fact that the Montreal General Hospital is more than able to sustain itself, the wealth of Montreal is to-day better able to support two such institutions than fifteen years ago it was to sustain one.

PHARMACEUTICAL EDUCATION IN THE PROVINCE OF QUEBEC.

We have received a long and able communication upon this question from a prominent member of the Pharmaceutical Association of this Province, which we would have inserted with great pleasure had not the recent action of the College of Physician and Surgeons of Lower Canada taken away much of the pith of his remarks. The opposition offered by that body to the conferring upon the Pharmaceutical Association Licensing power, was so strong that the Legislature refused to grant them the privileges sought for. In this, we believe the representatives of the medical profession in Quebec acted injudiciously, although with the best of intentions. The Pharmacutists were, however, determined to succeed, and we are given to understand that everything now points to a favorable issue. At the meeting of the College of Physicians and Surgeons of Lower Canada, held in Montreal, the commencement of May, Mr. Mercer, the able President of the Quebec Pharmaceutical Association, attended and laid before them the desires, wishes, and determinations of the members of the body he represented. We are informed that the result was successful beyond anticipation, and that the prospect now is, that when the Pharmacutists go before the Quebec Legislature at its next session praying to be incor-

porated into a College of Pharmacy, they will find their former successful opponents their most earnest and active friends. This change was sure to come, but the most sanguine could not have expected it so soon. We congratulate our friends of the Pharmaceutical Association on this victory.

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

The semi-annual meeting of the Board of Governors of the Physicians and Surgeons of Lower Canada was held in the Lecture Room of the Natural History Society, Montreal, on Tuesday, the 13th May. The following Officers and Governors were present:—Dr. W. E. Scott, President, in the Chair; Drs. Russell and Weillbrenner, Vice-Presidents; Drs. Rottot and Tessier, Secretaries, and Dr. Blanchet, Registrar-Treasurer; Drs. A. Jackson, J. E. Landry, A. G. Belleau, R. P. Howard, H. Peltier, G. E. Fenwick, E. H. Trudel, Edm. Robillard, Jos. Marmette, Edw. Boudreau, C. T. Dubé, A. T. Michaud, J. A. Duchesneau, J. S. Brigham, J. B. Gibson, F. D. Gilbert, A. G. Fenwick, A. M. Hamilton, L. R. Church and Joshua Chamberlain. After the ordinary routine business, the following gentlemen obtained the License of the College on presenting their respective diplomas:—*Laval University*,—W. Maguire, Jos. Eug. Grondin, Z. Gravel. *McGill University*,—Jos. D. MacDonald, J. Whiteford, F. J. Shepherd, J. J. Farley, T. J. Alloway, H. R. Perry, F. E. Cutter, L. McK. Fortune, N. E. Chevalier, T. F. Guest. *Victoria University*,—J. R. MacDonald, Jos. Lanctot, Tancrède Gaboury, G. J. Dubault, *alias* Jacques, G. Archambault, Alfred Desautells, M. Filiatrault, N. Fafard, Jos. R. Gaboury, Jos. Comeau, Ls. Jos. Martel, O. Coutu, A. Germain, R. Brodeur, G. Desrosiers Lafrenière, A. Aubry, J. B. Laporte, E. Lalonde, G. Beaudry. *University of Bishop's College*,—W. Macdonald, R. F. Godfrey, G. F. Slack, R. N. Webber, G. B. Shaw, I. Fontaine. *Trinity College*,—A. S. Campbell, F. D. Astley. Mr. F. D. Cutter, of Sutton, also obtained his license, on passing examination. The following gentlemen were admitted to the study of medicine after passing the usual preliminary examination:—Messrs. L. Crépault, J. E. J. Cartier, H. Poisson, N. Matte, J. B. Martel, J. E. L'Esperance, F. X. Lavoie, Jos. Godbout, P. F. DesParts, E. Tremblay, C. R. Belle, F. X. Gauthier, A. Brissette, A. Jeannotte, O. Beaudry, T. J. Sullivan, B. Campeau, A. Fortier, O. Beauchène, A. Hébert, R. McNichols, W. Petit, P. Fortin, N.

Longtin, R. Poisson, Jos. Robillard, Jos. Burque, T. Brisson, V. Coté, A. Maucotel, A. Thérien and George Frechette.

VICTORIA MEDICAL COLLEGE, TORONTO.

The following gentlemen passed their primary and final examinations at the close of the recent examinations of this College:—Messrs. Nathaniel Brewster, John L. Burkhart, Alex. Douglas, Wm. H. Johnson, John Kirkpatrick, D. F. McDonald, Davidson McDonald, Peter McLean, and Wm. Philp. Honour Class—Wm. H. Johnson, Gold Medallist; Nathaniel Brewster, Silver Medallist; Mr. Davidson McDonald, honorable mention. Scholarships—Messrs. Peter McLean and John Kirkpatrick.

TRINITY COLLEGE MEDICAL SCHOOL, TORONTO.

The following gentlemen have successfully passed their primary and final examinations in this institution:—Messrs. W. Blake, W. Brock, W. W. Bredin, A. M. Dingwall, C. East, D. B. Frazer, D. Frazer, J. W. Gracey, H. Howitt, W. T. Harris, L. D. Healy, W. Irving, L. J. Lennox, W. Lowry, A. McLaren, C. S. Murray, D. W. Mitchell, T. Millman, J. McDiarmid, C. F. Patten, J. D. Thompson, and T. W. Reade.

The convocation for conferring degrees took place 10th ult., and the following gentlemen were presented:

For the degree of M.D.—Richard Ardagh Callighen and Walter Lambert.

For the degree of M.B.—W. Blake, W. W. Bredin, A. M. Dingwall, C. East, H. Howitt, A. McLaren, C. S. Murray, D. W. Mitchell, C. F. Patten and Thos. Millman.

University Gold Medalist.—A. M. Dingwall. *Faculty Gold Medalist.*—H. Howitt. *Faculty Silver Medalist.*—W. Blake. *Certificates of Honor*—In the final examination.—C. East. *Certificates of Honor.*—In the primary.—D. B. Fraser, D. Fraser, W. Lowry, J. W. Gracey.

MCGILL COLLEGE MEDICAL SCHOOL, MONTREAL.

The following gentlemen have successfully passed their final examination in this University and were admitted to the degree of M.D., C.M., on the 28th of March, 1873:

D. O. Alguire, R. W. Bell, H. Brown, D. A. Carmichael, N. E. Chevalier, F. A. Cutter, O. C. Edwards, I. R. Ellison, W. Ewing, J. J. Farley,

L. M. Fortune, E. A. Gaviller, T. F. Guest, J. Hills, R. N. Hurlburt, W. F. Jackson, H. J. M. Jones, T. Kelley, E. G. Kittson, B. D. McGuire, J. B. McConnell, J. McDiarmid, J. D. A. McDonald, J. McLeod, R. S. B. O'Brien, D. O'Brien, H. R. Perry, P. E. Richmond, F. J. Shephard, J. A. Stephenson, A. W. Tracey, G. O. Walton, W. T. Ward, R. C. Young, I. W. Whiteford.

Holmes' Medalist.—T. Kelly.

Prizeman (Books.)—D. O. Alguire.

Honorable mention.—F. J. Shephard, D. A. Carmichael, H. J. M. Jones and R. W. Bell.

OPENINGS FOR MEDICAL MEN.

In the village of New-Hamburg, county of Waterloo, a well established village and country practice, together with valuable property, will be sold cheap. For particulars apply to Dr. J. N. Steifelmeyer, New-Hamburg, Ont. There is also a good opening for a medical man in the village of Cheltenham, county of Peel; also in Mille Roches, county of Stormont, Ont. *Canada Lancet.*

TO OUR SUBSCRIBERS.

One more number and our first volume is closed. There are a few who have regularly received the *Record*, who have not sent us their subscription. As we have placed it at the lowest figure we ask as a special favor, that those indebted to us, will remit the amount immediately.

AMERICAN MEDICAL ASSOCIATION.

The annual meeting of this great National organization commenced in St. Louis, Mo., on the morning of Tuesday, May 6th, 1873, and was closed at noon on the Friday following. Not less than 450 members were in attendance, embracing representatives from thirty-two States and Territories. The reception and treatment of the members of the Association by the Committee of Arrangements, the profession and citizens of St. Louis, and the daily press, was cordial, dignified, and honorable.

PERSONAL.

A vacancy having occurred in the attending staff of the Montreal Dispensary by the removal of Dr. Sewell from Montreal, it has been filled by the election of Dr. G. F. Slack, late House Surgeon of Charing Cross Hospital, London. Dr. G. P. Girdwood having been transferred to the Consulting Staff

of the Dispensary, the vacancy thus created has been filled by the election thereto of Dr. E. K. Paton, late House Surgeon of Sheffield (Eng.) Infirmary. These elections took place at the annual meeting of the corporation, which was held on the 7th May, when the Institution was announced to be in a prosperous condition. Nearly 6,000 patients were prescribed for during the past year.

Dr. Colin Sewell, lately of Montreal, and Dr. David Leslie Phillip, of Brantford, have been elected corresponding members of the Medico-Chirurgical Society of Montreal.

The following appointments have recently been made in the Medical Faculty of Bishop's College: Dr. J. Baker Edwards has withdrawn his resignation of the Professorship of Chemistry, and Dr. George B. Shaw has been appointed Lecturer on Chemistry. Dr. A. Latour has been named Assistant Demonstrator of Anatomy, and Dr. Wolfred Nelson Curator of the Museum.

Dr. Colin Sewell has sailed for England *en route* for Australia.

Dr. R. T. Godfery, a graduate of Bishop's College this season, is at present in London continuing the study of his profession.

Dr. Whiteford, of Belleville, McGill College, 1873, sailed on the 17th May for England, for the same purpose.

Reviews.

Florida and South Carolina, as Health Resorts,
—by WILLIAM W. MORLAND, M.D., of Boston.
Boston JAMES CAMPBELL & Co., Publishers.

This small pamphlet although it contains some information, and some useful hints, is altogether too discursive. The question of "expatriation of invalids," as it is termed by the London *Lancet* is one of very great importance. There is no doubt but that very often, a careless, hasty opinion is given, which banishes the invalid from the comforts of home and the sympathy of friends, and which a little more care and thought on the part of the Physician would have prevented. It is not every case of pulmonary disease which is to be benefitted by change and each requires thoughtful consideration of the surroundings awaiting the patient in the proposed temporary place of his sojourn. Our author says "It is worse than useless for those who have not means to be well cared for to leave their homes—the invalid cannot rough it."

Florida is first spoken about, and it has several well known resorts, among them Jacksonville and St. Augustine. One of their great drawbacks has been the wretched character of the food obtainable and the equally bad manner in which it is cooked. He says "what class of invalids should go to Florida?" Consumptives undoubtedly—with a due discrimination of cases—not those whose days are numbered. Then many with Bronchial affections. More especially are the cases of comparatively dry, irritating cough, and uncomfortable throats, benefitted by the soft air along the St. John River. Many go to St. Augustine—but our experience compels us to say with far less advantage, sometimes with positive harm. The immediate proximity of the sea is the difficulty."

He says "However delightful it may be to feel the crisp, fresh breeze coming in from the sparkling, sunlit ocean, over which one gazes with such delight, from the shores down to whose margin the quaint old town has crept, and lazily dreams away its tropical existence—there is danger. We have observed marked aggravation of symptoms in bronchitic patients who had come from Jacksonville, or farther, to St. Augustine. A few days, only, sufficed to show the necessity for immediate return—a favorable result justifying the action. There are many other affections, however, which the more bracing air of St. Augustine would suit far better than the mild, relaxing climate of the interior of Florida. Persons suffering from that nervous or general debility previously alluded to—loss of tone and vigor—or from the so-called "breaking down" from overwork; and doubtless from a variety of other ailments—would do well by sojourning for a time in the oldest town of the States—sauntering among orange-groves, or through gardens fragrant with full-blown roses in March—floating out upon the bright waters, to the signal disturbance of the shoals of pelicans and other sea-fowl which so picturesquely fill the coves and inlets.

AIKEN, South Carolina, is alluded to, but as we have just received a separate pamphlet about this place, we pass it over for the present.

Nassau, New Providence comes in for a brief notice. The climate he considers to be delightful, and peculiarly suited to phthisical patients from November until the middle of February—just the period, when variableness of temperature in Florida renders it undesirable and even unsafe for invalids to go there. With this view, therefore, the proper course for patients would be to go first to Nassau, remaining during the period indicated; thence by steamer, running fortnightly, to Havana, where a day or two will

suffice; thence to Cedar Keys, Florida, and thence to the best localities. Dr. Shattuck has called attention to the important fact that the harbor at Nassau is constantly *flushed*—no stagnation occurring in bights or pools, etc. This arises from its peculiar conformation, which allows the tide thoroughly to wash, in a straight course, through its whole extent, backwards and forwards—certainly a highly valuable hygienic provision.

A word of caution, in conclusion, to invalid sojourners at the South. Do not hurry back because it begins to grow very warm—*hot*, perhaps—by the middle or last of April. Change your quarters slowly. If in May the Floridian temperature becomes excessive, inducing languor and prostration, a move, of course, had better be made. The gravest error you can commit, however, is *suddenly* to exchange the soft, tropical air for the sharp, moist, terribly penetrating, northerly and easterly winds of New England and Canada.

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Obstetric Aphorisms for the use of students commencing Midwifery practice.—by JOSEPH GRIFFITHS SWAYNE, M.D., Physician accoucheur to the Bristol General Hospital, second American from the fifth English Edition, with additions by Edward R. Hutchins. Philadelphia, Henry C. Lea—1873—Montreal, Dawson Brothers.

Two years ago the first American Edition of this work was issued, and was speedily exhausted—a sure and certain indication, that it met and supplied a need, which was felt by students, and those just commencing the practice of their profession. Indeed we consider the little work to be by far the very best of its kind that we have ever seen, and the information to be conveyed in clear, plain, and concise language. Although it is intended for those young in the profession, those older would have their minds much refreshed by a glance at its pages. The additions by the American Editor are many of them very valuable, and considerably add to the practical character of the work. We notice however, that although Dr. Swayne advises Chloral Hydrate, as preferable to Opium in Puerpural Mania, the American Editor says “in this disease our hope should be in Opium or the *Lancet*.” A contradiction of this kind is out of place, and should not occur.

DECENNIAL CATALOGUE OF THE BELLEVUE HOSPITAL MEDICAL COLLEGE.—This elegantly-bound volume is entitled: the “First Decennial Catalogue of the Trustees, Faculty, Officers, and of the Alumni of the Bellevue Hospital Medical

College, of the City of New York, from 1861 to 1871,” and is compiled by Frederick A. Castle, M.D., Historian of the Alumni Association. Dr. Leroy M. Yale gives the history of the school from its organization to 1872. The total number of names of graduates in the catalogue is 1,073. The names of 18 graduates, who have become irregular practitioners, are properly omitted. The tinted paper, clear type, and the general arrangement of the catalogue, have not been equalled by previous works of other similar organizations.

Medical Items.

BRITISH MEDICAL ASSOCIATION.—The annual meeting of this Association will be held this year in London. The session occurs on the 6th, 7th and 8th of August. The present roll of membership has upwards of five thousand members.

CONCEPTION AT ELEVEN YEARS.—Dr. Dills, of Carlisle, Ky., (*The Clinic*, March 29th, 1873), was called to attend a colored girl in labor, aged eleven years and nine months, and found a vertex presentation, first position; the pelvis was large and roomy, labor progressed rapidly, and a living child weighing nine and a half pounds was the result. The girl had never menstruated.

[Lobstein and Canes (*Medico-Chirurgical Review*, October, 1838) each relates a case in which menstruation commenced in, and continued regularly after the second year of age; in one of these cases the girl conceived in her eighth year. B. S. T.]

BIRTHS.

In Montreal, on the 15th April, the wife of Dr. Francis W. Campbell, of a daughter.

At Point St. Charles, Montreal, on the 2nd of May, the wife of Dr. Thomas Rodger, of a son.

At St. Johns, on the 30th inst., Mrs. (Dr.) Brisett, of a daughter.

MARRIED.

In Montreal, on the 7th May, by the Rev. Robert Campbell, M.A., Dr. Peter McLaren, to Lizzie, only daughter of W. Cairns, Esq., all of Durham, Ormstown, Province of Quebec.

In Montreal, on the 15th May, at the Church of Notre Dame by the Rev. Mr. Rousselet, Parish Priest, Alphonse Leclaire, Esq., to Mary Julia, only daughter of Samuel B. Schmidt, Esq., M.D., all of Montreal.

DIED.

In Montreal, on the 15th April, Annabella Rodger, infant child of Dr. Francis W. Campbell.

In Montreal, at the General Hospital, on the 28th April, from injuries received while tobogganing on the 1st February last, John Anderson, aged 33 years.

At Quebec, on 9th May, Mrs. Josephine Deschamp, aged 67 years, wife of J. B. Meilleur, M.D., formerly Postmaster of Montreal.

At Quebec, on 15th May, William James Anderson, M.D., L.R.C.S., Edin., aged 61 years.

At Toronto, on the 9th May, Elizabeth, wife of J. P. Russell, M.D., Edin.

MONTREAL:

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Original Communications.

Two years and a half in a London General Hospital. By G. F. SLACK, B.A., C.M., M.D., M.R.C.S. Eng., late House Surgeon, Charing Cross Hospital, London.

In the course of a year a large number of cases of erysipelas came under treatment in a London hospital, some idiopathic, or, as they are usually called, medical; the greater number, however, following on injuries, operations, etc. Cases of medical erysipelas usually occur in large numbers in the spring and autumn among the poorer classes, generally attacking hard drinkers and those who are exposed to the night air. I recollect a great many policemen were attacked in the spring of seventy-two. It is very curious to notice the entirely opposite plans of treatment followed respectively by the physicians and by the surgeons. The physicians, as a rule, order low diet, purgatives and very little stimulant. On the other hand, the surgeons order bark and ammonia, mild aperients and stimulants in amounts varying according to the gravity of the case and the previous habits of the patients. The results tell strongly in favor of the latter plan of treatment, which I think is the only rational one, as most cases attacked by erysipelas are in a debilitated disordered state of health and require strong stimulants with aperients. If a lowering plan of treatment be pursued for a few days, unless the attack is very mild, the disease spreads, the patient becomes delirious, grows gradually weaker and weaker, and finally dies from exhaustion. On the other hand, if a stimulating, and, at the same time, alterative course be followed, the disease soon comes to a standstill and a rapid recovery is the result. It is a matter of some importance to find out what stimulants the patient has been in the habit of indulging himself in, and to order that in preference to any other. If no special preference is shewn, beer and brandy, in varying amounts according to the urgency of the case, will generally produce the best results. Should any particular form of stimulant prove nauseous to the patient, it ought never to be forced upon him, as a more agreeable substitute can generally be found. The muriate tincture of iron has been strongly recommended in these cases. In the very large number of erysipelatous cases which I have had the charge of, in not one single one have I seen any benefit from the use of this drug; in fact, in severe cases, where the tongue is thickly coated and where there is a tendency to delirium, I have seen it do

harm. I have, in severe cases, stopped giving ammonia and bark and tried iron, and the result has been a return of delirium and other bad symptoms. On returning to the ammonia and bark, marked improvement has taken place. Out of all these cases I have seen only two deaths, and this is the more remarkable as persons in London who are attacked by this disease, as a rule, belong to one of two classes, either very hard livered or those exposed to all weathers, being at the same time badly clothed and fed.

One of these was a Belgian laborer, who was struck on the side of the head by a large iron bar. He had a very long ragged wound of the scalp, extending from the temple to the back of the head. A considerable portion of the skull was laid bare. He had a very severe attack of erysipelas from which he was slowly recovering, when, by an unfortunate mistake in the diet card, in one day he was dropped from twelve ounces of brandy to four. His supply of porter was also cut short. The consequence was that he rapidly became worse, and in twenty-four hours was dead.

The other case was a very curious one. A short, square-built, previously healthy man, who earned his living by carrying parcels, etc., one morning noticed a small red spot in his groin. He kept on with his work, thinking that it would pass away. The next day finding that it was rapidly spreading, he took to his bed and remained under the care of his medical man for two days. The inflammation continued to spread up the abdomen and down the thigh. On the fourth day he was brought to the hospital, where in spite of all treatment he grew rapidly worse, the disease spreading up the back sides and down both thighs, the penis and scrotum being also implicated. The skin and deep tissues began rapidly to slough, and in a week the poor man was dead. Previous to this attack he had always enjoyed the best of health, had led a very active life, and had never over-indulged himself in any way.

With regard to the many local applications which have been recommended for this disease, nothing answers better than covering the part or parts affected with cotton wool. It is as well to dust flour over before applying the wool. The flour is soothing and the wool keeps the part warm. Other applications, such as nitrate of silver, collodion, etc., I have seen used but without benefit, and in cases of facial erysipelas the application of collodion does harm, at least delirium has rapidly supervened in some cases where the face had been painted with it. If the eyelids become completely closed, they will be sure

to slough unless the precaution is taken of making several punctures in the lids with the tip of a lancet. This relieves the tension and the lids soon recover themselves. If this point should not be attended to, a portion of the skin covering the lid sloughs, a cicatrix is formed, which, after a time, contracts, thus causing the lid to become everted, and in time the sight of the eye is destroyed.

Much has been written about the spread of erysipelas from case to case and bed to bed. In some hospitals wards are set aside expressly for such cases, where they are crowded together, and the result is simply to lessen the chances of the worst and feeblest cases recovering. A person suffering from this disease wants as much fresh pure air as possible, and this result cannot be attained if several similar cases are collected together. There is one way, and one way only, of a person in a bed near an erysipelas case contracting the disease from that case, and that is by using the same sponge, towel, or by the attendants carrying clothing from one bed to the other, or after handling an erysipelas case going on to some other case without first carefully washing their hands. I have seen patients suffering from erysipelas scattered about a ward among all sorts of cases without the slightest evil result, great care being always taken to have a separate sponge, towel, etc., for each case, and to wash one's hands carefully before passing on to the next bed. These precautions being taken, I am quite certain that no fear need be entertained of the disease spreading from bed to bed as is sometimes the case. Erysipelas will hang about a bedstead for months, and each successive case will suffer in a greater or lesser degree from it. I remember a case in point: a patient, with fracture of the tibia, had an attack of erysipelas. About a month after he left the hospital, another case of fracture of the leg was placed in the same bed. Erysipelas attacked this man's leg. By a strange chance, six weeks or so after his dismissal, another case of broken leg was admitted and was so unfortunate as to be placed in this same bed. The result was that he had an attack precisely similar to the two preceding cases. During the interval between the admission of each of these two cases, the bedstead was thoroughly scrubbed with a solution of carbolic acid and the bedding completely changed. More care should be shown in thoroughly disinfecting all articles that have been used for a case of erysipelas than in setting aside a special number of beds or a ward for such cases, such beds and such wards becoming in time so completely saturated with the poison that nothing short of a fire will disinfect them.

When writing about disease of the shoulder, I omitted to mention a very interesting case of acute inflammation followed by complete destruction of the shoulder-joint, occurring in a baby three months old. When the mother brought it to the hospital it had been suffering about a week, had lost flesh rapidly and was nearly worn out with pain. There was much redness and swelling about the joint, and the axilla was filled up with pus. A small opening was made in the axilla, from which a large amount of matter escaped. In spite of every attention at the end of a fortnight the child died from exhaustion. The structures forming the joint were completely disorganized. The mother was a perfectly healthy woman, and there was no reason for suspecting that the child had been ill-used in any way.

65½ St. Antoine Street.

Progress of Medical Science.

THE TREATMENT OF WHOOPING-COUGH WITH QUININE.

By B. F. Dawson, M.D., Clinical Lecturer on the Diseases of Children in the Medical Department of the University of New York; Physician for Children to the Demilt Dispensary; to the New York Free Dispensary for Sick Children, etc.

I am well aware that every therapeutical assertion, especially concerning pertussis, is to be accepted with the utmost caution, and that value can be placed upon such only as have been well tried and are based upon careful clinical study.

I deem it, however the duty of every physician, after having carefully observed the value of any one therapeutical agent in the cure of some one disease, to make the same known to the profession, whereby its real value may be proven or its worthlessness exposed. In advocating the use of quinine in pertussis, I am fortunate in being able to support my own experience with that of one whose name is well known on both continents, and whose contributions to the progress of medical science are always received as the teachings of one speaking with authority. I refer to Professor Binz, of the University of Bonn, Germany.

In 1870, a paper on "The Use of Quinine in the Diseases of Children" was contributed by him to this journal, (Vol. III, No. I, May, 1870,) in which he advocated the use of quinine in pertussis, and stated that in his hands it had accomplished valuable results. Considering pertussis to be a neuritis of the pneumogastric nerve, caused by infectious and irritating mucus that has accumulated in the larynx and pharynx, and having found by experiments that quinine destroyed, even when highly diluted, all structures found in normal mucus, he supposed, without taking into consideration the more

intimate morphological connection, that the mucus of pertussis also would be affected in a similar manner by quinine.

In this he was not disappointed, the trial equalling his expectations.

In the clinic for children's diseases which he held in Bonn, he says: "I have treated for the past two years all the cases of pertussis, without any exception, with quinine. The best proof of its good effects is seen in the fact that those in charge of the little patients repeatedly call again for the 'bitter medicine' whenever they have succeeded, either by coaxing or force in administering it to them. There was a most striking difference to be seen in those whom it was impossible by any means to induce to swallow the solution of quinine. In these cases the whooping-cough assumed its regular obstinate course; in the others, although living in all other respects under perfectly similar circumstances, the paroxysms were always reduced in frequency and severity." * These good results with quinine, he stated, could only be obtained by strictly observing the following conditions: "*It should be given in solution; the dose should not be too small, and should not be administered in a vehicle that will prevent it from coming in contact with the mucous membrane in its passage through the pharynx;*" and the neglect of one or all of these rules he considers the reason why other observers have seen no positive results from the use of this drug. Certainly it is not just to condemn a remedy as ineffectual when it is not employed in the proper manner.

The assumption that pertussis is a specific local catarrh, caused by a fixed contagion admitted from without, Prof. Binz thinks admits of being hypothetically explained by the fact of adults being almost unexceptionally exempt from it. "The stronger development of the epithelium may be regarded as a protection against the affection of the mucous membrane. This greater development in children probably takes place quicker if those parts of the throat, from pertussis, have been in a hyperæmic condition for weeks, and thus it is easy to comprehend how the immunity originates after the affection has once been surmounted." †

Still another cause of pertussis has been advanced. Dr. Letzerich, of Germany, ‡ in 1871, asserted in a paper on the subject that he had discovered a form of fungoid growth which vegetates in the epithelium of the air passages, and by its irritation causes the convulsive attacks of coughing. The expectorated mucus in patients suffering from pertussis, he says, contains masses of brownish red spores, with occasional threads of mycelium which in the later stages of the disease becomes very abundant. These observations were made by experiments upon rabbits into whose tracheæ he introduced the fungus; in a short time the latter became affected with a noisy and violent

cough—in fact, a genuine whooping-cough. The rabbits thus affected were killed and examined, and their air passages were found to contain the same fungus as that found in the sputa of human subjects; in fact, the mucus presented precisely the same appearance.

The fungus theory is certainly a very plausible and possible one, and one that even seems to be proven by the effects of therapeutical measures directed against the development of the fungus.

The fact that narcotic remedies do sometimes greatly influence whooping-cough, does not, however, weaken this latter theory, for by their use the sensitiveness of the pneumogastric nerve, and of the whole nervous system, is so benumbed as to but feebly appreciate or respond to the irritation in the pharynx and larynx.

Quinine, it is well known, has a powerfully destructive effect on true fungi and fungus germs—hence its great power over septic or zymotic affections; and why should it not influence the growth of the fungus of pertussis?

This theory of Dr. Letzerich tends to strengthen our belief in the appropriateness of Prof. Binz's treatment, for if the fungus theory is the correct one, then quinine with its destructive effects on fungoid matter may certainly be considered a most appropriate remedy.

Another advocate of the use of quinine in pertussis, a short time after Prof. Binz's views had been made public, was Dr. Breidenbach, who published a paper (noticed in *The Practitioner*, Feb. 1871, London,) on the efficacy of the hydrochlorate of quinine in a violent epidemic of 1870. In all pure cases he states its effects were really surprising, as soon as he had from precise observations determined the proper dose and mode of administration, in in which latter point he thinks lies a great part of his success. The amount administered by him—the age of the subjects varying from three weeks to eight years, and the violence of the attack being very different in different cases—varied from $1\frac{1}{2}$ to $15\frac{1}{2}$ grains. No other remedy than quinine was employed, and some of the children were freely exposed by poverty to the injurious effects of the weather. In the worst cases, he says, after the use of the remedy for forty-eight hours, the frequency and violence of the attacks diminished.

With such strong testimony in favor of the quinine treatment of pertussis, it is somewhat surprising that nothing, or very little, has been done in this country to test its value. Even in our text-books on diseases of children, nothing is said in reference to the use of quinine in whooping-cough, and in such recent works as the last editions of Lewis Smith's and Meigs and Pepper's books, the omission still continues, notwithstanding that the articles already referred to appeared in 1870—1 in an American journal, the only one devoted to diseases of children published in the English language. We can but trust that in the future editions the subject will receive proper attention.

Having opportunities for testing the value of anything new in infantile therapeutics, I determined

* American Journal of Obstetrics and Diseases of Women and Children, vol. iii, No. 1, page 8.

† Loc. cit., pages 9, 10, foot notes.

‡ Quarterly Journal Medical Science and American Journal of Obstetrics, vol. iv, page 761.

after having read Prof. Binz's paper, to apply his treatment in all cases of whooping-cough coming under my care, at the two dispensaries with which I am connected, as well as in my private practice.

I did not have long to wait. On December 4th, 1871, the first case came to my class at the "Free Dispensary for Sick Children"; the following is the record of it, and five of the most striking cases.

CASE I. Annie C—, 4 years. First whooped three nights ago; since then five or six times a day; is worse at night, paroxysms very soon ending in vomiting. Ordered solution of the sulphate of quinine of fifteen grains to the ounce of water, a teaspoonful to be given every two hours. No other treatment. To return on the 6th.

Dec. 6.—Mother states that she vomited the first dose, which was given at 1 P. M., and considerable thick phlegm. Had no whoop until just before giving the evening dose at 7; also once at night. The paroxysms were not so severe. She whooped once at 9 this A. M., but much softer, without any nausea. Ordered half a teaspoonful of the quinine solution in one of water every two hours, and to return on the 8th.

Dec. 8.—Child greatly improved in appearance. Mother states that she has whooped but once since the 6th, and that was on the same evening. Ordered to continue medicine, and return on the 10th.

Dec. 10. Has not whooped since 6th. Ordered to continue the quinine in same manner, but only three times daily for one week. To return if she whoops again. This she did not do; so she was registered as cured.

CASE II. Margaret M—, 7 years. Brought to the same institution Dec. 18, 1871. First whooped five nights ago, (Dec. 11), since then has grown worse, and now whoops almost every hour. Had an attack while in the dispensary, which was very severe, and was followed by vomiting. Ordered solution of the sulphate of quinine, ten grains to the ounce of water, a teaspoonful every two hours daily. To return Dec. 20.

Dec. 20. Vomited first and second doses, with it considerable stringy sputa, more than in previous attacks; a slight whoop occurring each time. Since then has whooped but twice during yesterday, once during the night, and on rising this A. M. Attacks not so severe. Medicine ordered to be continued.

Dec. 24. Child has whooped but once daily in the evening since 20th. Continue treatment.

Dec. 28. Has not whooped for two days. Continue treatment for one week.

Jan. 5. No return of whoop. Discharged cured.

CASE III. Bernard W—, 22 months. Healthy child. Brought to the Demilt Dispensary Dec. 20, 1871. Whooped first on the previous evening, since then two or three times. Ordered quinine in solution, five grains to the ounce, a teaspoonful every hour.

Dec. 24. Child whooped but twice since taking the quinine on the same night, Dec. 20, and vomited the first three doses, with them considerable tough sputa. Continue treatment.

Dec. 28. No return of the whooping since the night of the 30th. Discharged cured.

CASE IV. Albert F—, 10 years. Was brought to my office by his father, Jan. 3, 1872; he having whooped twice during the preceding night. Ordered quinine sulphate, ten grains to the ounce, a teaspoonful every hour. To call in two days.

Jan. 6. Whooped once very slightly in the night of the 3rd. Not once since. First dose nauseated; coughed up considerable thick phlegm after first few doses. Ordered to continue the quinine for one week. No whooping occurred during that period.

CASE V. George F—, 4 years. Brought to the Demilt Dispensary Jan. 11, 1872; having had the whooping-cough for the past two weeks. Paroxysms occur several times daily, and so frequent at night as to keep all awake. Vomits frequently and shows markedly the effects of the disease. Ordered solution quinine, ten grains to the ounce, a teaspoonful every hour during the day, and at night when awake.

Jan. 13. Much improved, the paroxysms not lasting so long or being so severe; ending at first in coughing up thick phlegm, but not so much now. Had three attacks during the night. Continue treatment.

Jan. 17. Has greatly improved; has not whooped for two days until this morning, when his mother thought he did. Ordered to continue the quinine.

Jan. 23. Has not whooped since last visit. Is "wonderfully well," as the mother expressed it. Was not again seen.

CASE VI. George W—, 3 years. Came under my care Feb. 24, 1872. Had two whooping attacks during preceding night, and once on the morning of visit. Is in good health otherwise. Ordered quinine, ten grains to the ounce of water, a teaspoonful every hour.

Feb. 26. Whooped twice on the 24th, and once yesterday noon, though not so severely, and easily coughed up thick mucus. Last night had but one severe attack of coughing, but did not whoop.

Feb. 28. Whooped once very slightly night before last; none since.

Feb. 30. Has not whooped since last visit.

March 3. Has not whooped since the 28th. Ordered to discontinue the quinine, and to be brought to me should the whooping return. The child was not again seen, and I subsequently learned that the whooping did not return.

The above six cases have been selected out of sixteen cases of pertussis seen by me during the past year, in which quinine was the only remedy used; the remaining ten presenting similar histories. Out of the sixteen cases, the shortest cure was effected in one day, and the longest in twenty days. In but two cases have I been disappointed in the efficacy of the quinine. They were two dispensary cases; and from the fact that one, a little girl, was under care of her father, and the other was a "farmed-out" infant of twelve months, I am inclined to attribute the failure to the negligence of those in charge of them, the quinine not being given to them as frequently as

ordered. In both these cases, however, there was some palliation of the paroxysms.

In regard to the administration of so disagreeable a remedy, I found that, though frequently there was some difficulty in getting the children to take it, yet it was exceptional for them to resist after the first two or three doses, and in only a very few did it cause vomiting. The direction to give the children a piece of an orange or a little sugar five or six minutes after taking the quinine, doubtless, had considerable to do with their seeming willingness to take the "bitter medicine."

As to how the quinine so very remarkably influences this most troublesome and severe disease several theories might be advanced. If the fungus theory of Dr. Letzerich be the correct explanation of pertussis, then we can readily account for its destructive influence on fungoid development, and consequently its power consists in removing the cause of local irritation, which gives rise to the reflex phenomena evidenced in the whooping.

The above theory and explanation carries with it considerable weight, and, appears to me, should be accepted until disproved, or a more convincing pathological explanation of pertussis is given.

For my own part, I accept it, and in consequence consider pertussis an affection of the mucous membrane of the pharynx and larynx, and the "whooping" as simply reflex. And the fact that almost all remedies given for other than their local effects, have either signally failed or but partially succeeded, strengthens this hypothesis.

Nevertheless, I do not attribute the rapid cure effected by quinine to the simple destruction of the fungus, but also to its nauseating bitter taste. In every case of pertussis, it will be conceded by all, there is an abnormal secretion of a thick tenacious mucus from the mucous membrane of the pharynx, (whether this secretion is due to simple catarrhal or reflex hyperæmia, or to fungoid development, it matters not,) which may or may not excite a paroxysm of whooping, but which certainly aggravates and prolongs the latter, as may be proved by the fact that the paroxysms invariably cease the moment this mucus is removed either by the coughing, vomiting, or the finger. Now, the effect of a small amount of a solution of quinine, when taken into the mouth and swallowed, is instantly, from its bitter and nauseating taste, to excite a free secretion of thin mucus from the buccal mucous membrane and the salivary glands, and this softens and renders easy of dislodgment the tenacious mucus referred to. The frequent repetition of the quinine, therefore, keeps up this free secretion, and thus prevents the mucus from becoming tenacious and difficult of dislodgment. At each act of coughing, therefore, the accumulated mucus is readily loosened and expectorated, and unobstructed inspiration obtained. The rapid loosening of the cough, the briefness of the attacks in comparison with those previous to the administration of the quinine, and the easy expectoration, certainly tend to favor the correctness of the above theory.

The failure of quinine against pertussis, in the hands of others who have tried it, is undoubtedly to

be attributed to the manner of its administration—either in large doses at long intervals, or in the form of pills; in either case, therefore, the local effects upon which I place the greatest value are not obtained. While writing this paper, a friend, whose practice is largely amongst children, informed me that he met with no success with quinine in pertussis; but on his informing me that he had always given it in large doses, morning and evening, I attributed his failure to that fact.

The object with which I have written this paper is to call the attention of the profession to this treatment of pertussis, and invite them to give it a careful trial, feeling convinced that if the following rules are carefully observed, few, if any, will be disappointed in their results.

1. Give the quinine (sulphate or hydrochlorate) dissolved by acid in pure water only. For children under 3 years, from gr. v. to gr. viii., and for older children and adults, from gr. x. to gr. xlj. to the ounce.

2. Give not less than a teaspoonful *every single*, or, at the longest, every two hours during the day, and whenever cough comes on in the night.

3. Give nothing afterward for some minutes to destroy the taste or to wash out the mouth.

4. Continue giving it notwithstanding the first doses may be vomited.

5. Be sure that the quinine is pure and thoroughly dissolved.

Appendix:—Since the above paper went to press, two cases of whooping have come under my care. One, a boy of three years, who was brought to my clinic in the University on Feb. 8; had whooped severely four and five times daily, and as often during the night. He had an attack in the presence of the students in the lecture-room. He was ordered quinine gr. v. to the ounce of water, a teaspoonful every hour daily. No other treatment. He was again brought to the clinic the following Saturday, Feb. 15, when his father stated that the attacks at once grew less severe and frequent after taking the quinine, and that on Wednesday and Thursday (fifth and sixth days) he whooped but once in each twenty-four hours, very slightly. The medicine gave out on Thursday evening, however, and since then the whooping has increased in severity and frequency. The other case was a little girl two years old, who was brought to the Free Dispensary for Sick Children on Feb. 11. She had whooped for three days, five or six times during the day and night. Was ordered quinine as in the preceding case. Was again seen Feb. 15, at my clinic, and shown to class. In this case the mother confessed to having been negligent in giving the medicine, not having given it oftener than four or five times during the day; and yet she said the child had greatly improved, and had whooped but once or twice during the night time only since taking the quinine. Both of these cases were also seen previous to and after treatment by Dr. P. B. Porter and Dr. Beverly Robinson, and being the last cases under my care, are a valuable addition to the preceding report of the six out of my first cases.

In the foregoing paper I wish to be understood as advocating the value of quinine in curing the "whooping" chiefly, the cough in many of the cases lasting for some time after the whooping ceased, and which requires the usual treatment for bronchial catarrh.—*American Journal of Obstetrics and Diseases of Women and Children, Feb., 1873.*

ON ACUTE ARTICULAR RHEUMATISM.

A Lecture delivered at Bellevue Hospital. By Austin Flint, M.D., Prof. Practical Medicine, etc. [Reported Phonographically for the *Record*.]

GENTLEMEN:—My remarks to-day will be upon the subject of acute articular rheumatism, and they will be based upon the history of this man's case who is now before us. His name is P., æt. 22, Norwegian, and by occupation a blacksmith. To-day is the tenth day of his disease. I may here remark, that this disease, especially in its acute form, is not very frequently seen in his hospital. The present case does not show the disease in its acute form, for the patient is apparently approaching convalescence, yet it will serve to illustrate some of the important points pertaining to this disease. The word rheumatism is a term which has been used with a good deal of latitude, and under this name several different affections have been taken in, such as certain neuralgic troubles, certain affections of the muscles, and certain affections of the joints. When, however, we use the term articular rheumatism, we refer to a very distinct and clearly defined affection. It is a constitutional affection, characterized by local manifestations consisting in an inflammation generally affecting several joints of the body, and not unfrequently fibrous structures elsewhere than in the joint. It is an affection which usually attacks the greater part of the joints of the body, and these articular affections are but the local manifestations of the constitutional disease. These local affections are in certain points distinguishable from the ordinary inflammation of analogous structures. We have no suppuration, none of the inflammatory products, no productions of new tissue, which we might expect in ordinary inflammation, and these are essential points of difference which characterize these local manifestations of articular rheumatism. Another point which is very striking is, the inflammatory condition frequently subsides and disappears in a very short time; one day it is present, and the next day perhaps it may be entirely gone. The occurrence of these local manifestations in different joints successively is also a striking feature of the disease, as one joint may be affected to-day, and another to-morrow. Another feature which goes to show its constitutional character, and establish what has been said with regard to the local manifestations is, the joints are affected symmetrically. The law of parallelism is strikingly illustrated in this disease; corresponding joints on both sides of the body are affected, and it is seldom that the strict law of symmetry is violated. If the joints upon both sides of the body are not affected, it does not violate the law but it is simply the fact that

the law is not illustrated. If corresponding joints are not affected, analogous ones are affected, such as the wrist and ankle perhaps, but an affection of the wrist and knee joint upon different sides of the body is rarely seen. This man is 22 years of age, which illustrates the fact that rheumatism, primarily, affects young subjects. A person, however, who has had the disease in early life, will be subject to repetitions of attacks ever afterwards, thus showing a constitutional tendency. Acute articular rheumatism also belongs among those diseases which are inherited, or rather, to which a predisposition may be transmitted. This man has generally had good health, and this is the first attack of the disease he has ever had. He was attacked in the day-time. It is more frequently the case that the patient is attacked in the night-time. The disease generally attacks suddenly, yet in a certain number of cases, the acute attack is preceded by more or less soreness and tenderness about the joints. As we look at the history of this case, we see that for two or three weeks this man had felt soreness in the joints, but not sufficient to prevent him from continuing in his occupation. The first manifestations which he had were in the smaller joints of the hands and feet; the carpal and metacarpal and tarsal and metatarsal joints. It first appeared in the right hand, then in the left foot; then in both knee-joints; and then both wrists; then both shoulder-joints; and then in both hip-joints. The law of parallelism, it will be seen, was very well illustrated. At the present time the joints are comparatively but little affected. I deem it hardly necessary to dwell at any length upon the local symptoms, such as the pain and swelling which accompany the local manifestations; and will dismiss them with the simple remark, that we do not usually have much swelling and erythematous flush about the larger joints such as the hips and shoulders. I must now ask you to remark the statement which I am about to make, as it is of special importance in connection with the topic I shall presently mention. The statement is this: this man has had no pain at any time on the chest, no præcordial pain at any time during the course of the disease. I will soon speak more particularly of the importance of this statement in the history of his case. This is a disease which in its acute form—for it is presented to us both as an acute and sub-acute affection—is characterised by a good deal of febrile movement pertaining to the disease itself, and also symptomatic. One of the popular names for this form of fever is "rheumatic fever," and it is not altogether improper, for the fever does not depend upon the local affection entirely but it is sometimes altogether out of proportion to the local affection. We have, therefore, a fever which is partly essential and partly symptomatic. Last evening this man's pulse had fallen to 72 and the temperature in the axilla was 100 $\frac{1}{4}$. This affords a good illustration of the disparity which is sometimes seen between the pulse and temperature, as regards the criteria of a fever. When such a disparity is present, the temperature is entitled to the preference in deciding the question of fever or no fever.

This morning the pulse was 68. It is always to be

borne in mind, that, in many diseases, about the time of convalescence, the patients have a pulse which is below the average frequency in the same persons in health. This is the case in typhoid and typhus fever, pneumonia, and some other affections. This morning there is no fever present, the temperature being 98.1.

This man has been taking quinine and nitro-muriatic acid. It might, at first, strike the mind as an incongruity in the treatment of this disease to administer an acid, while the predominant feature of the disease is the presence already of an acid in the system, but really there is no incongruity in it. Over and over again we apply remedies and measures which are directly antagonistical, and each will meet its own indication, and often the only proper method of treating certain cases is to meet the indications.

We come now to speak of one of the important events which is liable to occur in the course of inflammatory rheumatism. This disease in itself, as far as the constitutional difficulty is concerned, is not dangerous to life, but there is a danger in connection with certain incidental events and those events which are most likely to occur relate to the heart. There is a special liability to an inflammation affecting one or both serous investments of this organ, and these are the untoward events to be looked after in cases of articular rheumatism. The importance of the disease and the permanent welfare relate chiefly to the occurrence of these complications. There are some other complications which are so infrequent that they do not give us much care, and we will pass their consideration. The cardiac affections are the prominent ones. Endocarditis occurs in quite a proportion of cases, but I do not give you the figures, because I think there has been some looseness and error in making up statistics upon this point. The reason for this I will soon mention. Pericarditis is of much less frequent occurrence than endocarditis, and it may be said further with regard to these complications, that if we have pericarditis we have endocarditis, but the rule does not hold in the opposite direction. Pericarditis involves a certain amount of immediate danger, though a great proportion of cases get well. What we probably have in this case is endocarditis, and first of all we will study the evidence upon which this probability is based. The evidence in this case is not absolute, but it is *probable*. Now you will recollect the fact to which I called your special attention a few moments ago, *viz.*, this patient has not had præcordial pain, or any chest symptoms whatever, during the progress of his case. The diagnosis of endocarditis is therefore based entirely upon physical evidence. This is the reason why endocarditis is a disease which has been discovered within the last half century, and was never before known. It was discovered by physical exploration, and must continue to be recognized by this means, because it occurs without any subjective symptoms. It is associated probably with some increase of the circulation, but as this increase goes more or less with the rheumatism we cannot draw the inference from this that endocarditis

is present. How are we to determine whether a patient has endocarditis or not, who is suffering with articular rheumatism? We are to reach a positive diagnosis in this way: if the patient be under your observation, and you can determine by auscultation that there is no mitral systolic murmur present at the commencement of the attack, and then in the course of the disease a mitral systolic murmur is developed, you know that the patient has endocarditis. It all depends upon the development of this mitral systolic murmur, and the murmur is the hinging point. This patient has mitral systolic murmur but the diagnosis is not positive, because the patient had the same murmur when he came into the hospital, and we do not know certainly that the murmur, has been developed since the commencement of the disease. It has probably been developed in this patient since the commencement of this attack, for it is the first attack the patient has had of the rheumatism; he has always been well, and as the murmur is one which does not indicate regurgitation, it is altogether probable that in this case it is evidence of endocarditis. I find here that the apex of the heart is beating in the fourth intercostal space, as it not infrequently does when the body is in a recumbent position. By percussion I determine that the heart is not enlarged. This would not be the case if the patient had had mitral disease for any length of time previous to the present attack, for he would have more or less enlargement of the heart.

Within a certain circumscribed space about the apex of the heart, I get a murmur, and it is not propagated much beyond this quite limited area. It is not proper to call this murmur a mitral regurgitant murmur, because there is no evidence of regurgitation.

What do we look for as physical evidence to show that there is regurgitation? The fact that a mitral murmur is present, is not limited to the apex, is tolerably loud, and is propagated to the left, would be evidence that it was one of regurgitation.

I also get a murmur at the base of the heart, but I attach no special importance to this, because we cannot attach much importance to a murmur at the base of the heart in a case of articular rheumatism. It is very frequently present, and is dependent upon the condition of the blood. It is always present in females, or at least, I believe I have never seen a case of articular rheumatism in a female where this murmur was not present. It is just here I apprehend that a great confusion has arisen with regard to statistics in reference to endocarditis, and many cases have been called endocarditis in which the disease did not exist. I would not make my diagnosis relying upon this murmur at the base, unless I had the mitral systolic murmur at the same time.

Endocarditis is a serious complication, because in it the rheumatism has laid the foundation for the subsequent occurrence of valvular lesions.

We have attenuation of the valves, thickening and calcification of the valves and other valvular lesions, all arising from an endocarditis in connection with rheumatism, and we have not much knowledge of

endocarditis except in connection with these cases of articular rheumatism. We come now to ask the question, what are the indications in the treatment of acute articular rheumatism? In the first place we would like to cut it completely short if possible, but we cannot do this often, if ever. Next, we would like to abridge its duration, and there is reason to believe that this may be done to a certain extent. The great object, however, is to prevent these cardiac complications, pericarditis and endocarditis, for if a patient passes through this disease, and escapes these complications, he is exceedingly fortunate.

Just here, however, a knowledge of the natural history of the disease, based upon the observation of cases which have been permitted to run their course without the influence of therapeutical interference, is of value in making up our estimate of the value of treatment. In the year 1862 I conceived a plan of observing cases of articular rheumatism, without the use of medicine. The reason for so doing was because almost all the cases reported as having been under the influence of any special plan of treatment, such as mercurialization, colchicum, bleeding, blistering, &c., were reported as cured, and hence each plan of treatment was reported as being attended with the greatest success. I therefore reasoned that the probability was, inasmuch as all the different modes of treatment tended to success, that the disease itself tended towards getting well. I accordingly treated 13 cases in this hospital, and they got no remedy at all, except one which was intended for a moral effect upon the patients, and that, for the sake of giving it a name, was called the placebo remedy. The only treatment which these patients received, aside from this placebo remedy, was a little anodyne and local applications to the joints of a palliative character. I resolved to continue the plan of treatment until something occurred to render it improper to continue it longer, and in only one of the 13 cases treated after this method did any complication occur, and that patient had the complication when she came into the hospital. The average duration of the disease in those cases was 26 days, and no important complications took place. I reported these cases in an article entitled, "A Contribution toward the Natural History of Articular Rheumatism," which was published in the *American Journal of the Medical Sciences*, July, 1863. I hope I shall not be thought egotistical in referring to these observations. They were made in this hospital, and my object in making them was stated to the class then in attendance. So far as I know, a series of similar observations had never before been made. I am led to assert my claim to whatever credit may belong to precedence in this line of investigation, because shortly after my observations a similar plan for the same object was pursued by others. Guy's Hospital Reports, volume for 1865, contains a report of a considerable number of cases treated by Dr. Gull chiefly with mint water; and another report of additional cases was made in an article by Dr. Gull and Dr. Sutton, contained in the "Transactions of the Royal Medical and Chirurgical Society of

London," in 1869. I should not thus expose myself to the charge of egotism in asserting my claim to priority in the study of the natural history of articular rheumatism, had these observers made any reference to my article in the *American Journal of the Medical Sciences*. I feel bound to make this claim, not alone for myself, but for this hospital and for American clinical medicine.

Dr. Fuller, who is the author of the so-called "Alkaline treatment," states that cardiac complications will not arise after the alkalescence of the urine is once established, but I think this author is too ardent in his statements, for I have seen cases in which endocarditis has been developed while the patients were fully under the effect of the alkaline treatment. Statistics, however, show that there is a diminished liability to these complications, and therefore we are not warranted in repeating observations without remedies. The method of treatment to be pursued in a case of acute articular rheumatism, is the adoption of what is called the alkaline treatment. The prime object in this treatment is, to produce alkalinity of the urine, regarding that as the criterion that the system is sufficiently affected, in as short time as possible, for we cannot tell at what instant the complications may appear. To accomplish this the bi-carbonate of soda or potassa may be given in half-drachm or drachm doses every two hours, and by these doses you can render the urine alkaline within twenty-four hours at the farthest, with a good deal of certainty. After the urine has been rendered alkaline, the remedy is to be continued in varying doses sufficient to maintain the urine in an alkaline condition during the continuance of the disease. In this case before us, the disease has continued only ten days, and the patient is apparently convalescent.

Quinia in full doses also forms a good adjuvant in the treatment, as the patient is becoming convalescent. It contributes very much to the welfare of the patient. The joints are to be treated by palliating applications. Frequently you will find that shampooing the joints, be they never so tender, is very beneficial, commencing with gentle frictions, and gradually increasing the force as the patient can bear. Fomentations which contain alkalies and anodynes may be used also as local applications. As a rule, it is one of the great objects of medical treatment to relieve pain, for pain interferes with sleep and wears out the vital forces of the patient. Those patients afflicted with articular rheumatism may have opium sufficient to allay all irritation from pain, and give them quiet and rest. A more minute detail of the pathology of this disease must be considered at another time.

NOTE.—At a subsequent clinical lecture Dr. Flint presented a case of acute articular rheumatism during the course of which peri-endocarditis (developed when the urine was alkaline), chorea, and right hemiplegia from embolism occurred. Coincident with the occurrence of the hemiplegia, a basic systolic heart-murmur, which had previously existed, disappeared.

ON THE INJECTION OF PERCHLORIDE OF IRON IN POST-PARTUM HEMORRHAGE.

By W. S. PLAYFAIR, M.D., F.R.C.P., Professor of Obstetric Medicine in King's College; Physician for the Diseases of Women and Children to King's College Hospital; and Examiner in Midwifery at the Royal College of Physicians, London.

The discussion on the treatment of post-partum hemorrhage by the injection of a solution of perchloride of iron, which recently took place at the Obstetrical Society, has probably been studied by all who are interested in obstetrics.

It was the first occasion on which the merits and demerits of this most important improvement in midwifery had been formally brought under its consideration, and it is to be regretted that the value of the debate was somewhat marred by exaggerated statements and undue warmth of argument. It is certain that so active a method of treatment should be carefully studied. Like every other active treatment it is advisable that its indications and contra-indications should be thoroughly investigated by the light of experience, and there can be no doubt that we have still a good deal to learn about it. In common with many other speakers on that occasion, I stated that I had frequently injected the perchloride, and had never seen any ill effects follow its use. At the same time I was ready to admit, as I do not doubt that Dr. Barnes and all others who use it would willingly do, that an agent so potent should not be carelessly and indiscriminately used, and that certain inconveniences, or even risks, not yet fully made out, might attend its employment.

By a somewhat curious coincidence a few days after the debate I had a case under my care in which I used it, and, as I firmly believe, saved by it the life of my patient. Yet very grave and even alarming symptoms followed—due, it can hardly be doubted, to its employment, and I think that the case is sufficiently instructive to be worthy of record. It shows one class of dangers which may arise from it, and possibly the history will teach us how, under similar circumstances, these are to be avoided.

Two and a half years ago I saw, with Mr. Aikin, of Clifton Place, Sussex Square, a lady who was apparently at the point of death from post-partum hemorrhage. She had been confined of her fifth child rather more than two hours before I saw her, after a somewhat tedious labour, the breech presenting. All her other labours had been natural. She was a stout woman, thirty years of age. After delivery the uterus had contracted firmly, with no more discharge than usual. Mr. Aikin had stayed with her more than an hour, and had left her seemingly well and comfortable. Half an hour afterwards she had a tremendous gush of hemorrhage. Mr. Aikin was immediately summoned, and speedily arrived, accompanied by Mr. Rushforth, of Oxford Terrace. The patient was then collapsed and insensible, and to all appearance dead. Some brandy was introduced into the mouth through an aperture formed by the absence of one or two teeth, and a solution of perchloride of iron, which Mr. Aikin had fortunately with him, was at once injected into the uterus, and all

further loss was checked. When I saw her shortly afterwards she was still collapsed and pulseless, and I immediately sent for the necessary apparatus for transfusion, which seemed to afford the only hope of saving her life. Before the instruments arrived however, she had slightly rallied, and eventually made a good recovery, though she long remained blanched and anemic. Such was the formidable history of the patient previous to her present confinement.

On this occasion Mr. Aikin was unable to take charge of her, being confined to his home by illness, and I was asked to attend her in company with Mr. Rushforth. In no case is "forewarned, forearmed" a truer proverb than in relation to post-partum hemorrhage, and as we adopted every possible precaution to prevent it, we were in hopes that no repetition of the former flooding would occur. The head presented, and the labour was natural and easy. As the head descended a drachm of the liquid extract of ergot was administered. Firm pressure on the uterus was kept up as the child was expelled, and continued without intermission afterwards. A second dose of ergot was given shortly after delivery, immediately after the expulsion of the placenta. One or other of us kept kneading the uterus for three-quarters of an hour after the birth of the child. It contracted fairly, but not tightly, and it showed a tendency to relax. Two or three times small pieces of ice were introduced into the uterus to promote contraction. All this time there was no unusual loss, and we considered any danger of hemorrhage to be over. Suddenly, and while the uterus was still grasped by the hand, an appalling flow of blood occurred. I immediately emptied the vagina of a mass of clots, and, as all means of promoting contraction had been already vigorously employed, I at once proceeded to inject a solution of the perchloride of iron of the usual strength; and not a moment too soon, as the patient was already tossing about, sighing deeply and showing the well-known formidable signs of collapse. As I injected I felt the uterus contracting round my hand, and not a drop more blood was lost. Nothing could be more rapid and satisfactory than the action of the remedy, and I honestly believe nothing else would have checked the flooding or enabled us to save the patient's life. For two days all went well. On the third day the pulse was 100, and the temperature 102°. The day following the pulse was 120, small and thready, the temperature 104° in the morning, and 105° in the evening, the tongue dry and black, and the general condition very alarming. There was no abdominal tenderness whatever. The uterus was somewhat large, reaching nearly to the level of the umbilicus. There was little or no discharge, and what there was was highly offensive. Eight ounces of brandy per diem were administered, and 30 minims of turpentine every sixth hour, and a teaspoonful of Brande's beef jelly every hour. On internal examination, the whole vagina was found to be filled with small, hard, black clots, formed by the corrugating effects of the iron and believing that the symptoms were probably due to the retention in utero and decomposition of similar clots, giving rise to septic absorption, the cavity

of the uterus was freely washed out with Cond's fluid and water, by which several portions of broken-down coagula were removed. Next day things were worse rather than better, the temperature being $105\frac{1}{2}^{\circ}$, pulse 130. There was some cough, with sibilant râles, over the right chest. Still there was no local tenderness or other symptoms. We then had the advantage of meeting Sir William Jenner in consultation. The general treatment was continued, the quantity of brandy being increased. With the view of reducing the hyperpyrexia, gr.v of sulphate of quinine in pill were administered every third hour. The intra-uterine injections of Cond's were continued three times a day, and in the evening a large and highly offensive clot was ejected. Next morning the temperature had sunk to $102\frac{1}{2}^{\circ}$, and the pulse to 100. Treatment as before. Quinine now given every fifth hour. In the evening the temperature had again risen to 104° . Another large coagulum expelled after injection. Next morning the temperature had fallen to $101\frac{1}{2}^{\circ}$, the pulse to 86, and all fetor had disappeared from the discharge. No more coagula were passed. It is needless to continue a record of the case, as the improvement from this date continued to be steady, and in a few days the patient was convalescent.

There can I think be little doubt as to the sequence of events which gave rise to these alarming symptoms. When the iron was injected, although the hand was in the uterus, and the clots within it had been as much as possible removed, blood was still pouring out abundantly. The powerful astringent at once corrugated all the blood and coagula it came in contact with, and these hardened clots filled up the uterus and the canal of the vagina. In due course these began to decompose, and septic absorption took place. By the finger and the intra-uterine injection they were gradually broken down and removed. The improvement unquestionably dated from the expulsion of the two large and decomposing coagula on the sixth and seventh days after delivery. Immediately after this happened, the temperature and pulse fell remarkably, and recovery commenced and continued uninterruptedly.

What then is the lesson to be learnt from this case? Is it that the risk is too great, and that the injection of the perchloride of iron should be banished from practice? I think most unquestionably not. I have little doubt, knowing what I did of the patient's former labour, and having already tried in vain all the anti-hemorrhagic treatment at our command, that without the perchloride the flooding would have proved fatal. It is indeed precisely in these inveterate cases, where every means of inducing uterine contraction proves unavailing, that it forms so invaluable a resource. Rather, I think, it should teach us to limit its use to these only—as, I believe, Dr. Barnes has all along taught. It shows also that the retention in utero of hardened coagula, liable to decomposition, may prove a source of danger hitherto unsuspected. With a knowledge of this fact it would be our duty to secure the expulsion of the coagula as soon as possible after all risk of hemorrhage had ceased, and make sure that there was a free exit for

the discharge. This would best be done by satisfying ourselves on the second or third day after delivery that the vagina is not filled with clots, and removing them if present, and by using antiseptic intra-uterine injections freely, as in the above case, should suspicious symptoms arise. With a knowledge of this source of danger, it might probably be avoided in most cases. Whether any other astringent fluid, such as the tincture of matico, the use of which was suggested at the Obstetrical Society, would answer equally well in constringing the vessels from which the blood flows, and be less apt to produce hardened coagula, is well worthy of consideration. I question very much, however, if anything less than the most powerful and direct astringent is to be depended on.

Important as are the lessons this case has taught me, it has left me not a whit less a believer, but rather a firmer one, in this most invaluable remedy.—*London Obstetrical Journal.*

ON A NEW MODE OF TREATMENT OF FUNCTIONAL DYSPEPSIA, ANÆMIA, AND CHLOROSIS.

BY C. E. BROWN-SÉQUARD, M.D.

In 1851 I had to treat a very bad case of dyspepsia, and succeeded to cure the patient by a plan of treatment which, I think, deserves attention. Since that time I have employed it with complete or partial success in a number of cases of dyspepsia, of chlorosis, of anæmia, and also as a means of ameliorating or curing nervous affections caused by gastric disturbances or poverty of blood. I could not say, as I have not kept notes of all the cases, how many times it has succeeded or failed. In a number of instances where failure occurred, I have found that the patients had not carefully followed the rules, and that the failure was, at least in a good measure, due to this lack of care. In two cases only some increase of flatulency and of acid eructations took place during three or four days, when the plan was given up. In a case of dropsy, attended with anæmia, dyspeptic pains were increased for a week, when the plan was abandoned. These are the only instances I remember in which some bad effect was produced by this plan, and this aggravation soon ceased.

The first patient I submitted to this plan was a scientific man, 34 years old, of strong constitution, but reduced from several causes to a lamentable state of health. For about eight years he had been working very hard, taking no exercise, and living almost all the time in a vitiated atmosphere. He slept very little, and usually passed 18 or even 19 hours a day writing, reading, or experimenting. His diet was miserable, and, with the object of avoiding the need of much food, he took a great deal of coffee. He gradually, though slowly, became exceedingly weak. His digestion, which had been very good all his life, before he began to work so much, had gradually become very bad. He suffered greatly from pyrosis, and a feeling of great distress, and gastric distention after each meal. Acid eructations and gas were frequently thrown up into his mouth, and when he did not vomit he found that his food remained on his stomach so long, that in the morning he frequently

rejected things eaten the previous day. At last he had to give up work and stay in bed. But no improvement occurred from the rest he then had, or from various modes of treatment. His emaciation and weakness and dyspeptic symptoms increased, and his friends decided to have him removed to the country. But he was so weak that he had to be carried in a litter to the railway station. After a few days, finding that he had not improved, I decided to try a radical change of his alimentation, as regards the quantity of food to be taken at a time. Instead of *three* meals a day I made him take *sixty* or more. Every twelve or fifteen minutes he took two or three mouthful of solid food, chiefly meat and bread. He drank a little less than a wineglass of Bordeaux wine and water every thirty or forty minutes. On the very first day this mode of alimentation was begun, his digestive troubles* disappeared, and within a week he was so well that he returned to Paris, not, however, to go to work again, as he had been rendered wiser, but to prepare to go to the seashore. He continued the same mode of alimentation for about three weeks, and then gradually diminished the number of his homœopathic meals, and increased the amount taken at each of them, until in about 8 or 10 days he came to eat only three times a day, and a full meal at each time. His strength during the first week had become almost as great as it ever had been previous to his illness. Since that time up to this moment his life has been one of great hardship, which he has borne remarkably well, and dyspepsia has only troubled him in a slight degree, rarely and for short periods."

In one case only besides the preceding have I seen as rapid a return to health. That was the case of a young lady, whom I saw last year at Jamaica Plain, in consultation with my learned friend, Dr. S. Cabot, of Boston. In the case of this lady there was this additional good effect to this hygienic treatment, that the bowels, which were very costive before, began to act pretty well almost at once.

The plan, as stated in the above case, consists in giving but very little of solid or fluid food or any kind of drink at a time, and to give these things at regular intervals of from ten to twenty or thirty minutes. All sorts of food may be taken in that way, but during the short period when such a trial is made, it is obvious that the fancies of patients are to be laid aside, and that nourishing food, such as roasted or broiled meat, and especially beef and mutton, eggs, well-baked bread, and milk, with butter and cheese, and a very moderate quantity of vegetables and fruit, ought to constitute the dietary of the patients we try to relieve. This plan should be pursued two or three weeks, after which the patient should gradually return to the ordinary system of eating three times a day.

It is hardly possible to give more detailed rules as regards this hygienic mode of treatment. On the one hand I have found few persons willing or able to follow it fully. On the other hand, many pa-

tients, especially those who have no dyspepsia, do not need to take so minute an amount of food at a time. Besides, it is certain that the quantity of food required varies notably in different persons. Prof. John C. Dalton states that the entire amount of food needed by a man in full health and taking free exercise is: of meat, 16 oz. av.; bread, 19 oz.; fat, $3\frac{1}{2}$ oz.; and of water, 52 fl. oz.; i. e., about $2\frac{1}{2}$ lbs. of solid food, and rather more than 3 pints of fluid. According to Dr. Edward Smith and other European hygienists, the amount of solid food and of water required each day is notably larger than that marked out by the able American physiologist I have named. My experience with the patients on whom I have tried the plan of feeding above mentioned, shows that the amount of solid food required by an adult is nearly always as follows: from 12 to 18 oz. of cooked meat, and from 18 to 24 oz. of bread. As regards the quantity of fluids I have allowed, it has always been notably less than the amount indicated by Dr. Dalton (3 pints), and by Dr. E. Smith ($4\frac{1}{2}$ to 5 pints.)

I hardly need say that in carrying out the plan I propose, attention must be paid to three points: 1st, the liking and the disliking of certain things by the patient; 2nd, the importance of variety in food; 3rd, the digestibility of certain things compared with others, digestibility which varies immensely in different patients. When I found that there was no disgust for a meat and bread diet, I ordered that roasted beef or mutton, with bread, be the almost only kinds of solid food taken. But most patients were either soon disgusted with this diet, or refused even to try it. Having ascertained this, I allowed the selection by each patient of his own dietary, insisting, however, that the quantity of cooked meat should be at least 12 oz. a day. The most varied diet as regards the kinds of food can be followed, however, under this plan as well as when one has only two or three meals a day. The only absolutely essential points are that the amount of food taken every 10, 15, 20, or 30 minutes be very small (from two to four mouthful), and that the quantity of solid food in a day be from 32 to 40 oz., or a little less when, instead of water, the patient drinks beef-tea or milk.

I will not enter into long explanations to show how a marked benefit or a cure can be obtained in functional dyspepsia, in anæmia, and other affections by this mode of alimentation. I will simply say that the facts I have observed agree with the view that we are naturally organized, like most if not all animals, to eat very frequently, and not, as we do, two three, or four times a day. It seems certain from the facts I have observed that functional dyspepsia, when once it has begun (never mind by what cause), is kept up and increased by distention of the walls of the stomach. This fact is already well known, and physicians generally recommend that the quantity of liquid taken be very small, and that the solid food be nourishing as possible, so that its bulk may be reduced, with the view of avoiding great dilatation by the fluid and solid substances introduced in the gastric pouch. But although deriving some benefit from

* One of the symptoms which had preceded the others—monycism, persisted, and has remained ever since, being now as before of daily occurrence.

this diminution of distention, many patients continue to suffer who might be benefited or cured by the plan I propose.

It may be asked if there is no danger that distention of the stomach, by a full ordinary meal, after a patient has followed for two, three, or four weeks the plan I propose, would not be more difficult and a source of greater trouble than before that organ had been allowed to contract considerably during the time this plan has been pursued. Facts answer this question in a way that leaves no doubt. There has never been in the cases I have attended the least trace of an increased trouble due to that cause. Even those patients who have not derived benefit from my plan of alimentation, and among them two who had while following it more acidity and flatulency, have, at any rate, had no increased trouble after having given it up. It is probable that the good obtained from this plan in dyspeptic patients depends at first on the rest given to the irritated stomach, and subsequently on a great amelioration in the quality of the gastric juice.

In anæmia and chlorosis, not complicated with dyspepsia, the advantage of this plan lies in the rapidity of formation of blood from the notably increased amount of food that the patient can digest.

I have made but very few trials—and incomplete ones—of this plan in cases of organic affections of the stomach. I cannot but think, however, that it deserves being tried in most of such cases.

Against the obstinate vomiting of pregnancy this plan has already been employed successfully by a number of physicians, and once by myself in a case which many modes of medical treatment had failed. —*Archives of Practical Medicine*, January, 1873.

A CASE OF DISEASE OF THE EAR. FOLLOWED BY ABSCESS OF THE BRAIN.

By EDWARD H. CLARKE, M.D., Boston, Mass.

In the following case, the disease of the brain was probably the result of the inflammation of the middle ear, which attacked the periosteum of the tympanum. The inflammation then passed through that portion of the petrous bone lying near the upper wall of the tympanum to the dura-mater, and thence to the brain. The moisture and redness of the portion of bone described, and the adhesion of the dura-mater at that point, serve to mark the track of the disease.

This case illustrates the dangers attendant upon internal otitis, and the necessity of an early and vigorous treatment. If it had been possible to arrest the disease when it first attacked the ear, and before the bone, or rather the periosteum was invaded, the life of the patient would probably have been saved. Early and free leeching, with decided and continued counter-irritation, offer the greatest chance of safety in cases like the above.

The existence of so large a lesion of the brain without marked derangement of sensation or motion, is of considerable physiological interest. A portion of the right hemisphere, of the size of a hen's egg, was destroyed, without destroying motion or sensation of either half of the body. The slow pulse—

48 in the minute—and the slow and intermittent respiration, which existed simultaneously for several days after the attack of April 5th, made me suspicious of disease of the cerebellum. The patient appeared as if the action of the heart and lungs was nearly paralyzed. At the autopsy the elevations of the medulla oblongata were flattened by the pressure of the abscess upon them, and this was the probable cause of the slow pulse and breathing.

The treatment produced no result except the important one of relieving suffering. It is very likely that the paroxysms of intense pain, which appeared periodically for a few days when the pulse and respiration were the slowest, and which were apparently controlled by quinia, would have subsided of themselves. They were probably induced by an extension of the disease in the head, perhaps by the formation or increase of pus, and subsided as the brain became accustomed to the pressure. The bromide of potassium seem to control the restlessness and delirium in a marked degree.

A. T., an American lad, æt. 15, was attacked, while at school in the country, with severe otalgia of the right ear, during the last week in January, 1867. The pain was intense and persistent and according to his own report accompanied with tenderness and swelling of the right meatus, and pain in the ear with deglutition. He was confined to his bed for a week or more, and treated by a physician of the neighborhood. After a few days of suffering, the ear poured out a moderate discharge, and he obtained some relief. The relief, however was not complete, and he came to Boston for advice. I saw him on the 16th of Feb., 1867. He was able to come to my house. The hearing and appearance of his left ear were normal. His right meatus contained a moderate amount of purulent matter. The walls of the meatus were red, and the surface of the membrana tympani presented a radiated, red appearance. Inflation of the cavity of the tympanum through the Eustachian tube produced, momentarily, a sharp pain in the affected ear. He heard the ticking of my watch only when it was pressed on the ear. He was then suffering from otalgia, especially at night, so that his sleep was disturbed. Two leeches were applied to the orifice of the right meatus. He was directed to instil into the ear a solution of a grain of sulphate of atropia in an ounce of water every hour or two, if there was pain; the solution to be warmed before applying it. He was put on a restricted diet, and kept quiet. Counter-irritation by means of croton oil was kept up on the mastoid process, directly after leeching.

At the same time he was ordered the iodide of potassium internally. The meatus was syringed often enough to keep it clean. He gradually and steadily improved. The membrana tympani assumed a normal appearance, and the pain disappeared. By the 7th of March he heard the ticking of my watch two or three feet from his right ear. He slept and ate well, and complained of no pain or discomfort. Excepting weakness, he seemed to be well. During this apparent convalescence, he had three short attacks of severe pain in the right side of the head and

face. One took hold of the trifacial nerve, and yielded to the local application of aconite. Another seized the right supraorbital nerve, and yielded to veratria, not to aconite. The third attack showed itself back of the ear, and was accompanied with tenderness and swelling over the right mastoid process. This required leeching. All of these attacks were short, though severe. Excepting the weakness just referred to, he seemed to be fully convalescent by the 7th of March. On the morning of March 10th he was attacked, without apparent cause, with intense headache, intolerance of light and sound, nausea and frequent vomiting. His pulse soon became irregular, not intermittent, and feeble. His respiration was also slow, some times not more than eleven or twelve per minute. He had no cough. His respiration was vesicular. There was no tenderness over the liver or bowels. The latter were costive. The above symptoms persisted through the 10th, 11th, 12th, and 13th of March. They were apparently controlled, though not stopped, by the subcutaneous injection of morphia. During this period, he was supported by enemata of beef-tea. Every form of nourishment, liquid, or solid, that was tried by the stomach, he rejected. His pulse averaged about 60, though it was several times as slow as 48 and 50. The pupil of each eye acted normally. He had no delirium or intellectual disturbance.

The nausea began to abate on the 14th of March, and on the 17th he got and retained a little beef-tea with pepsin in it. He had a free dejection on the 17th after taking citrate of magnesia, the first for a week. He had another dejection on the 18th. At this time he seemed to be convalescing again. The intolerance of light had so far abated that he bore easily a subdued light in his chamber. He had no nausea or headache. He retained light food and took it with a relish; all opiates were omitted; and he slept quietly. During the night of the 19th he slept less easily than usual. Early in the morning of the 20th he complained of faintness, difficulty of breathing, and sharp pain in the back of his head and the upper part of his spine. These symptoms increased till they became violent, and were followed by delirium. One-fourth of a grain of sulphate of morphia was injected into his arm, and he became quiet in less than fifteen minutes, and fell asleep. Previous to the injection there was a return of nausea, vomiting, and intolerance of light and sound in addition to the other symptoms enumerated. When asleep, his pulse was 64 and regular, and his respiratory movements normal. He awoke, after sleeping several hours, in a much more quiet condition, without delirium or pain in his head or back. He still had frequent nausea, and was abnormally sensitive to light and sound. He was kept very quiet, put upon a diet of crust coffee with milk and lime-water, and ordered 20 grs. of bromide of potassium every four hours. His bowels were moved by enemata.

From this time he seemed to convalesce again. He got the bromide every four hours for three days, then every five hours for two days, then every six hours for two days and then twice in every twenty-four

hours. His bowels were moved every other day. He slept an average of eight hours every night. His tongue, which had never been much coated, became clean. His diet was cautiously increased, and he was able to eat bread, meat, and milk. His appetite for hearty food was strong. Early in April, he walked moderately about his chamber, bore a sufficient amount of light, had a good pulse of 84, and complained of no sort of discomfort. He went to bed at his usual hour in the evening of April 5th, and went to sleep. A serenade from a band of music, under the windows of a neighboring house, which continued for about an hour, aroused him from sleep at 1 A.M. He soon complained of intense headache; in a short time he became delirious, and soon after began to vomit. He got 60 grs. of bromide of potassium in divided doses in the course of two or three hours, and then became quiet and went to sleep. He had a dejection during the day, ate every little, and by night was comfortable again. He went quietly to sleep in the evening of April 6th, and was awakened with intense headache and delirium at 1 A.M. of the 7th, almost exactly twenty-four hours after the previous attack. Presently he had nausea and then vomiting. His pulse was irregular and 48 in a minute. His respiration was also slow and abnormal (*saccadé*). I injected his arm with half a grain of sulphate of morphia and he directly fell asleep. Twenty grains of bromide of potassium were ordered every four hours; a cathartic of citrate of magnesia, and a diet of gruel. He got a long and quiet sleep and awoke refreshed. His bowels moved freely. On the following morning he had another but less violent access of pain at about 2 A.M. After its subsidence the bromide of potassium was omitted and quinia was given. The first day he got 18 grs. in 12 hours without any subsequent tinnitus, and with a moderate paroxysm of pain at about 2 A.M. The next day he got 24 grs. in 12 hours, with slight tinnitus and no paroxysm of headache in the morning. After this the quinia was gradually diminished, and at the end of a week it was discontinued. The pain in the head did not return. From this time he seemed to improve again. He had a good appetite; ate freely of ordinary food; slept well; the action of bowels and kidneys was normal. He began to ride out, and about the 20th of April he went to his sister's house in the country, two or three miles from Boston. He often said that excepting weakness he felt perfectly well. He had not, at that time nor previously, any paralysis of sensation or motion. In two or three days, however, he began again to complain of pain in his head. At this time the pain came on in irregular paroxysms, and was not severe. He fell down once, while walking out, but got up again easily. He got quinia and bromide of potassium again but without relief. He referred the pain chiefly to the back of his head. It was accompanied with nausea and occasional vomiting. His pulse dropped from the neighbourhood of eighty to between fifty and sixty. His respiration was slow and irregular. He had no delirium, and the pupil of each eye acted normally. His urine was normal, and his bowels were moved sufficiently by an enema.

Indeed, throughout his whole sickness, a dejection rarely occurred except after an enema or a laxative. Soon after taking an enema, in the evening of April 25th, he apparently fell asleep, and died.

His death occurred about eleven weeks after I first saw him, and about fourteen weeks after the commencement of the difficulty in his ear.

Autopsy.—The head was examined thirty-six hours after death, by Dr. Calvin Ellis, who sent me the following report of the examination:—

“Dura mater much more vascular than usual. Arachnoid without the ordinary moisture. Convolutions of the upper surface of the brain flattened, as were also the elevations of the medulla oblongata. After the removal of the dura mater, the portion of the right hemisphere above the temporal bone bulged out in a remarkable manner, and was very soft to the touch. An incision showed white softening which extended nearly to the posterior part of the hemisphere, and quite extensively in all directions around an *abscess* situated above the petrous portion of the temporal bone, of sufficient size to hold about two ounces of thick pus. The lateral ventricles contained considerably more serum than usual. The septum lucidum and walls were softened.

“At the base of the petrous portion of the temporal bone, on the right side, the inner table, to a limited extent, was destroyed, and at this point the dura mater adhered. The cells in the interior of the bone contained more moisture than those of the opposite side, and had a reddish tinge. The tympanum and ossicula remained.”

My own notes of the examination say that the portion of diseased bone above described was adjoining or nearly over the tympanum and that the aspect of the tympanum was healthy. The brain, except around the abscess, was normal.—*Archives of Practical Medicine, January, 1873.*

DAVIS ON FLUID EXTRACT OF CASTANEA VESCA (COMMON CHESTNUT) IN PERTUSSIS.

Dr. Thomas D. Davis (*Philadelphia Medical Times*, Dec. 28, 1872), whilst resident physician of the Philadelphia Children's Asylum, at the suggestion of Dr. Parry, treated fifteen cases of whooping cough with this remedy. The paroxysms were very severe in all the cases, and frequent in most (varying from five to twenty-seven in the twenty-four hours.) In four cases there was no whoop. The patients had been treated with belladonna, but this was discontinued two days, and every case became decidedly worse. They were then given the fluid extract of the common chestnut leaves, and each case decidedly improved on the first day of treatment. The characteristic cough ceased in one case on the second day, in four cases on the third day, in six cases on the fourth day, in ten cases on the fifth day of treatment; the paroxysms in the remaining four cases occurring only twice in three cases, and only once in two cases on this day (5th). ‘The nurse in charge, who had witnessed many epidemics of this disease, declared she had never seen a medicine act like it.’ The medicine is made from the leaves gathered from July to October, those gathered late in the season

being preferred. The medicine may be administered as an infusion syrup or fluid extract. Dr. Gerhard, of Philadelphia, who highly praises this remedy, prefers the fluid extract made by Mr. John M. Maisch, from the following formula:—‘Chestnut leaves dried’ (why not from the fresh leaves?) ‘cut and bruised, sixteen ounces, glycerine five ounces, sugar eight ounces, and hot water a sufficient quantity; the extract to measure sixteen fluid ounces.’ The dose is half a teaspoonful to a teaspoonful every three or four hours for a child six years old. This remedy is praised by Mr. George C. Close, of Brooklyn (*American Journal of Pharmacy*, 1863), by Dr. J. Unzieker, of Cincinnati (*Medical and Surgical Reporter*, Oct. 26, 1867), and by Dr. J. Ludlow (*Cincinnati Lancet and Observer*, March 1869, p. 147, and *New York Medical Journal*, April, 1869). Dr. Davis remarks that the cases were at their height at the time the remedy was commenced when an improvement might be expected, but he considers (no doubt correctly) that the improvement was too rapid to be owing to a natural decline of the disease; a conclusion confirmed by the fact that on discontinuing the belladonna every case grew worse, but immediately improved again on the employment of chestnut leaves. All the reported cases occurred in the same epidemic during the winter of 1870. The chestnut leaves have been used for many years as a household remedy.

[Dr. Foster, of Huntingdon, and Dr. Howard Sargent, of Boston, recommend clover in whooping cough. Dr. Sargent gives occasionally through the day a wineglassful of an infusion made with two ounces of carefully dried blossoms of red clover steeped in a pint of boiling water for four hours. The mawkish taste is concealed by adding some liquorice root to the infusion. The writer employed this remedy during an epidemic occurring in a Yorkshire village in Aug. 1872 (an old hemiplegic man over seventy was attacked, and recovered, but he did not take this remedy), with decided success; afterwards he employed an infusion and tincture made with the dried and fresh flowers in London with less advantage. Dr. Inman has suggested that locality may exercise an influence on the efficacy of remedies.]

FIBROID TUMORS OF THE UTERUS.

Alfred Meadows, M. D., London, England (*Am. Jour. Obstetrics*), in his “Remarks on the Diagnosis and Surgical Treatment of Fibroid Tumors of the Uterus,” says that, having determined the situation of the tumor and its interstitial character, one is justified in attempting the removal of these tumors even though they be not intra-uterine or submucous, but are situated in the substance of the uterus itself, provided a proper canal be inaugurated. His plan is, first of all, to prepare the passages for the expulsion of the growth, and secondly, to detach the tumor from as much of its surroundings as possible, so that, by making of it a foreign body, nature may aid in its removal, as she would in the case of a dead fetus or mole-pregnancy, or

even a uterine polypus. Lastly, when nature has been given fair play, the éraseur should come to the rescue and remove at once what might otherwise be the work of many months or years. He had recently under his care a case in which the tumor was completely embedded in the substance of the uterus, so much so that the os was not dilated in the very least and he had the satisfaction, after three or four operations, of completely removing the tumor, which was of the size of a small cocoa-nut. The patient is now perfectly well.

At the date of writing he had two other cases of the same kind but in both the tumor was much larger. He had commenced with the same plan of treatment in these, and he had every reason to believe that a cure would be effected.

The first step in the process is to prepare the passages for the removal of the tumor. For this purpose he recommends free division of the cervix uteri in one or more directions. The next step is breaking with the finger through the capsule, and little by little detaching the tumor from its bed. During the intervals efforts should be made, by the administration of ergot, borax, cinnamon, and other so-called oxytoxics, to secure contraction of the uterus so as to favour nature's method of expulsion. Galvanism is also another agent of great power in this respect, and a firm bandage is of service in cases where the tumor is large and projects well into the abdominal cavity. After the removal of these tumors, he advocates the subjoined after-treatment. The first thing to do is to secure firm contraction of the uterus after it is emptied of its contents. This is necessary not only to prevent hemorrhage, but also to avert the occurrence of septicæmia. The latter object will be still further secured by frequent injections of warm solutions of permanganate of potash, carried well up into the uterine cavity. In reference to medicines, he knows of none which are either useful or desirable, except it be opium, and this he regards as of a greater value than any or all other medicines put together. He is also very partial to the employment of hot linseed and laudanized poultices to the abdomen in all cases of operations upon the uterus where there is a liability to pelvic or peritoneal inflammation.

TONIC TOOTH-POWDER

Triturate well together one ounce of pulverized Peruvian bark, one ounce of pulverized castile soap, and two ounces of the best prepared chalk. It may be flavored by adding a little of the oils of wintergreen and rosemary, with the latter in a very small proportion. The powder is not only good for the teeth, but also a preventive of, and a remedy for, spongy gums. Another very good tooth-powder may be prepared by the addition of one ounce of pulverized orris-root to the above. The addition of bole armenian to tooth-powders is only for the purpose of coloring them, and is not of the slightest benefit. The Peruvian bark will impart sufficient coloring to this preparation.—*Physician & Pharmacist.*

THE RESUSCITATION OF ANIMATION IN NEWLY-BORN CHILDREN.

Dr. John Gregory, of Manchester, England, calls attention to two opposite conditions which he has found to exist in cases of suspended animation in the newly-born. In the first class the head appears to suffer from a redundancy of blood; and is most common when the head is born some time before the body, and the pressure upon the portion remaining in the uterus and the vagina causes an accumulation of blood to take place in the head. This variety is generally relieved by allowing a small quantity of blood to flow from the navel. The second variety is less commonly noticed, and is that in which the reverse takes place. In a breech presentation the head, being born last, is subjected to pressure which empties its vessels and produces anæmia of the nerve-centres of the brain and medulla. Such cases are quickly relieved by placing the child's head downwards, by which posture the return of the blood to the cranium is encouraged. It is his practice in the latter class of cases to allow the infant to hang head downward for about a minute at a time, and employ also friction of the back and nucha. In both varieties the postponement of respiratory movements is attributed by him to disturbance of the circulation in the medulla.—*The Doctor*

TREATMENT OF FIBROUS TUMORS OF THE UTERUS BY SUBCUTANEOUS INJECTIONS OF ERGOTINE.

—Subcutaneous injections of ergotine have been used already in various affections, particularly against aneurisms, by Langenbeck and Albanèse, and against hemorrhage (menorrhagia chiefly), by Ruben and Zente. Dr. Hildebrandt has gone further, and tried ergotine injections against fibrous tumors of the womb. He at first, however, had only made use of that means against the hemorrhage brought on by such a tumor. An unhoped for result crowned the treatment, as the tumor, which was very large, gradually diminished, and at last disappeared in about fifteen weeks. Except during menstruation, daily injections were made with 3 parts of ergotine dissolved in $7\frac{1}{2}$ of glycerine and $7\frac{1}{2}$ of water. The amount injected was the whole of a Pravaz syringe. In five or six other cases the treatment was nearly as successful. In two cases, however, symptoms of poisoning by ergotine occurred, and the treatment was abandoned. These results are very remarkable indeed, and fully deserve the attention of surgeons. (*Berliner Klinische Wochenschrift*, June 14, 1872.)

HYDRATE OF CHLORAL IN INCONTINENCE OF URINE.

Dr. Girolamo Leonardi has found chloral a most valuable remedy in nocturnal incontinence of urine. The dose for children is from five to ten grains taken in water before going to bed. For adults the dose is proportionately larger. The treatment has been successful in all of his recorded cases. The remedy must be repeated for several successive nights.—*Lo Sperimentale*, April, 1873.

INFANTILE DIARRHEA.

At the Harveian Society on Feb. 20th, 1873, Mr. H. Cripps Lawrence read a paper "On Some Forms of Infantile Diarrhea."

Adopting the classification of Copland and West infantile diarrhea was considered under the forms of bilious, serous, mucous, and lenteric, and as presenting a non-inflammatory, or an inflammatory dysenteric type. Reference was made to the above in relation to clinical experience, pathological teachings, and the results of therapeutical agencies.

Clinical Experience.—Several clinical symptoms were noted, and the author pointed out how fully they established the multiform nature of the disease. The necessity for a careful study of the symptoms in every case was considered essential to the comprehension of the etiology of the malady. The etiology was treated of, in reference to the diarrhea which precedes, accompanies and succeeds weaning.

Clinical Symptoms.—Copland suggested that irritation of the duodenum in the vicinity of the common duct may act as an exciting cause of vinous diarrhea in infancy; the author believed that in some cases the coagulated casien of undigested milk may prove a sufficient origin for an irritation. Another practical point referred to was the value of nature's indication for rest in relation to thirst in severe diarrhea. The infant refuses to suck, probably because the act induces increased peristaltic action in the intestines associated with pain, while small quantities of cold water given by the spoon are relished. The initial symptom of most importance to the disease was considered to be vomiting; much value was attached to the initial symptom in disease, and the author referred to the late Professor Niemeyer's paper on the symptomatic treatment of cholera. To support this view he drew a parallel between the symptoms presented by severe cases of infantile diarrhea and those of cholera, attributing the similarity in the symptoms to the implication of the ganglionic system.

Pathology.—The intestinal lesions which occur in two forms of infantile diarrhea were compared.

I. In cases of atrophy with diarrhea, from improper feeding, resulting in virtual starvation.

II. In inflammatory dysenteric diarrhea.

In the first cases, the disease in the colon is trivial and secondary to the serious changes in the small intestine. In the second class, the small intestines are secondarily affected, and the changes in them subsidiary to serious disease in the colon, lower part of the sigmoid flexure, and rectum. Complete examinations are necessary, as medical men may have to give evidence in relation to many cases in connection with the Infant Life Protection Act, and the different medical evidence would be mainly based upon the pathological condition present as to whether an infant had died from starvation or diarrhea.

Treatment.—The treatment of infantile diarrhea was discussed as it attacks:—1. Infants at the

breast. II. At the time of weaning. III. In the inflammatory or dysenteric form.

Vomiting was an initial symptom of note; it should be arrested, as its persistence keeps up increased peristaltic action in the intestines.

I. *At the breast.*—Cold induces the serous and bilious forms. The body should be kept at rest in this and in all forms, the circulation gently restored, abstinence from the breast being necessary when the milk is vomited curdled and bile-stained; barley-water or plain water to be given by the spoon till the sickness abates, then small quantities of milk and lime-water, milk and soda-water; and later on, the breast milk with a few drops of brandy; and ultimately, suckling may be renewed. The coagulated masses of casien should be allowed to be rejected, before attempting to allay the vomiting, and a small dose of grey and rhubarb powder should precede the astringent treatment of these forms of diarrhea. Laxatives are inadmissible. When infantile diarrhea is epidemic, isolation or removal of the infant becomes necessary.

Maternal influences inducing diarrhea must be combated. Mental anxiety by consolation; too high living by moderation; too spare a diet by a more generous one. Colic and diarrhea in the mother require laxative or astringent remedies combined with antispasmodics and carminatives—an addition too often omitted. Abstinence from the breast is necessary for a few hours.

If the breast milk of the mother totally disagrees, a wet-nurse or artificial feeding will become requisite.

II. *At Weaning.*—Diarrhea ab lactatorum assumes a mucous or serous form, and requires an alterative and sedative treatment—*e. g.*, grey and Dover's powder, preceded by a laxative if necessary.

The gums need only to be lanced if they become tense and inflamed; rubbing the gums with iced water generally relieves ordinary tension. Refrigerant salines, the warm bath, followed by grey and Dover's or the compound antimonial powder in proper doses, generally suffice to check this form of diarrhea. For sour-smelling evacuations Vogel recommends that the milk be alkalized by a weak solution (3j ad fl 3 vi) of carbonate of soda.

III. *Inflammatory Diarrhea.*—Depletion, but seldom necessary, by leeches to the arms. Warm linseed-meal poultices to be applied every three hours. In this form, the late Dr. Baly found castor oil with a few drops of laudanum very useful. The above failing, enemata of mucilage or cold starch with a drop or two of laudanum are required.

Extreme irritability of the stomach requires a mustard plaster to the epigastrium, small doses of calomel and opium, low diet, bland fluids in small quantities. Irritability of the nervous system induces an hydrocephaloid condition, requiring support and sedatives.

Stimulants become necessary after the acute symptoms subside; and brandy given in definite quantities diluted with milk should be given in doses of not more than five to ten drops in a tablespoonful or more of alkalized milk, to an infant under one year

of age; the frequency of its repetition depending on the effects produced.

Enemata should not exceed from two to four drachms in bulk, and Vogel uses tin syringes, like urethral ones. The introduction of the enema and the removal of the pipe should be very gradual.

Dr. Niemeyer's treatment of the asphyctic stage of cholera* with some modifications might be applied to some cases of inflammatory infantile diarrhea.

Pepsine wine, in doses of one or two teaspoonsful thrice daily, as recommended by Dr. Davidson,† and jalap powder will be found useful in diarrhea arising from feeble digestive power.

During convalescence the feet should be kept warm by wollen socks, and a flannel abdominal belt be worn constantly while any diarrhea remains.—*London Obstetrical Journal*.

CAMEL-HAIR BRUSHES FOR THE CLEANSING OF WOUNDS.

At a recent meeting of the Clinical Society of London, Mr. Callender brought to the notice of the Society the methods he had adopted in his wards at St Bartholomew's for the dressing of wounds. By the use of brushes, the cleansing of a wound is not a painful process. A further recommendation is that the employment of sponges and other materials commonly used for cleansing wounds, and which some surgeons believe to be a frequent cause of the passage of the infectious material from one patient to another is thus done away with.

INFLUENCE OF BELLADONNA ON SWEATING.

In some interesting communications to *The Practitioner*, Dr. Sidney Ringer brings forward an abundance of evidence to prove that belladonna and its active principle are able to check and prevent sweating, whether the result of disease or induced by exposure to an elevated temperature. In the former case his observations enabled him to conclude that one two-hundredth of a grain of atropia injected under the skin is generally sufficient to check sweating for one night. This dose produces dryness of the fauces, but does not dilate the pupils. Stramonium, it was found, is able to exert the same influence.

HOW TO REMOVE ADHESIVE PLASTER.

Every surgeon, doubtless, is familiar with the appearance of a part which has been enveloped in adhesive plaster, after the straps have been removed. The appearance is not one in very good keeping with a cleanly and neat surgical dressing. The portion of the plaster which is left adhering to the skin may be quickly and completely removed by the use of oil of turpentine and sweet oil. Use a little more than half turpentine. This compound, carefully rubbed over the parts with a bit of cloth or sponge, and then washed off with warm soap-suds, will leave the surface as clean as nature ever intended.—*N. Y. Medical Record*.

* "On the symptomatic treatment of cholera." Translated by Dr. W. P. Latham, Bell and Datoy.

† *Practitioner*, March, 1872.

FORMULA FOR HEADACHE FOLLOWING ALCOHOLIC DEBAUCH.

WRIGHT'S.

Take of Solution of acetate of ammonia,
tincture of bitter orange-peel,
syrup of bitter orange-peel, aa 20 parts.
Water 500 "
S. To be given in repeated tablespoonful doses.—
Revue de Thérap. Méd.-Chir.

LAXATIVE PILL.

R Ext. aloes pulv oz. ss.
Gambogiæ dr. i.
Rhei pulv dr. ss.
Olei cinnamom gtt. xx.
Make 120 pills.

The above is the favorite laxative pill of a distinguished lecturer and practitioner.—*Geor. Med. Comp.*

ERGOTINE AS A HÆMOSTATIC.

C. H. Boardman, M. D., St Paul, Minn. (*North-western Med. and Surg. Jour.*), speaks highly of ergotine, hypodermically given, in an obstinate case of placenta prævia, after all other remedies had failed. For a period of two weeks, the perils incident to this grave condition were averted, and the patient brought safely to within a fortnight of her full time.

BORACIC ACID AS A PRESERVATIVE FOR MILK.

According to A. Hirschberg (*New Remedies*), the addition of 15 grains of boracic acid to two pounds (equalling a quart) of milk will keep it sweet in hot weather for five days. The usefulness of the milk is said not to be impaired, but the cream rises more slowly than normal.

NEW OPERATION OF THORACIC PARACENTESIS.

DR. T. J. MACLAGAN proposes, in the *British Medical*, the following method of performing thoracic paracentesis:—

In performing the operation, I would simply carry out Mr. Lister's instructions for opening a psoas abscess. A filtered solution of carbolic acid, of the strength of 1 in 100, should be put in the spray-producer, and the spray kept playing around the part at which the opening is to be made. The usual precaution should be taken of first inserting a grooved needle or small trocar and canula, previously dipped in carbolized oil [1 of carbolic acid to 7 of olive oil]. The surgeon being satisfied as to the proper part for the incision, a free opening should at once be made into the pleural cavity by means of an ordinary bistoury, also previously dipped in the carbolized oil. The spray, of course, must be kept constantly playing over and around the wound, not only during all this time, but also while the fluid is running away, and must be continued till the dressing is applied. The best dressing is Lister's antiseptic gauze. A strip of this should be cut and folded so as to form a square of six or eight inches; eight,

twelve or sixteen layers may be used according to the amount of anticipated discharge; this should be applied over the wound as soon as the fluid is all away; until it is applied there should be no intermission in the play of the spray around the wound. If it be considered desirable to wipe the side before applying the dressing, this should be done with a cloth dipped in a solution of carbolic acid twice the strength of that used for the spray. A piece of some waterproof material should be applied over the gauze, and the whole fastened round the chest. The dressing should be changed on the following day, and afterwards every second, third or fourth day, according to the amount of discharge. If it be desired to keep the wound open, this may be done by inserting a bit of antiseptic gauze between its edges. The spray must always be kept playing on and around the wound while the dressing is being changed.

The chief advantages of the above mode of treatment are: (1) that the withdrawal of the fluid is effected more speedily and efficaciously than by any other mode; (2) that there is no trouble either to physician or patient, with drainage-tubes or other inconvenience; (3) that the entrance of air, with whatever germs or other ingredients it may happen to contain, is efficiently guarded against; and 4 that the patient need not be confined to bed, but may even take open air exercise before the wound is closed (if his general state permit it) without interfering with the efficacy of the treatment. In some cases this last recommendation is one of great importance.

TODD ON ABLATION OF A CANCER OF THE NECK OF THE UTERUS IN A PREGNANT WOMAN.

Dr. Walton Todd (*Pacific Medical and Surgical Journal*, Dec. 1872) thinks that the dangers of operation on the gravid uterus have been exaggerated. He relates a case of a woman, aged thirty six, suffering from cancer of the posterior lip when two months pregnant. There was considerable hæmorrhage, which was arrested by a tampon of perchloride of iron. In spite of the complication of erysipelas of the face, she recovered and went to full term, and was confined naturally of a healthy child. The urgent reason for the operation was the intense pain in the hip and abdomen, which disappeared after the amputation of the neck.

THE REGULAR PROFESSION IN PHILADELPHIA.

The *Philadelphia Medical Register* states there are in that city 699 regular physicians; of these, 50 are on the retired list.

THE CAUSE OF COLLAPSE IN DIPHTHERIA.

Professor Molser, of Greifswalde, has published two cases of sudden collapse during apparent recovery from diphtheria. They give a somewhat different theory for the cause of death than has been urged by Trousseau. In fact this complication is barely mentioned by the latter author. Niemeyer describes such cases as those whose general condition has not

excited much apprehension, or, in fact, has been regarded as satisfactory, until without warning of any kind, they fell into a collapse. In other cases still profound syncope has occurred a number of times, at last ending in death.

A great deal of discussion has taken place with regard to the implication of the nervous system in the pathological changes, but in many cases no lesion whatever could be discovered. Wagner was the first to call attention to the fact that in these cases there was usually some change in the muscular tissue of the heart.

In the two cases cited by Mosler collapse was sudden and unexpected, the first taking place on the fifteenth, and the second on the fifth day. In both of them the walls of the heart were found dilated, and the seat of fatty degeneration. The trabeculæ in each case were flattened down.

The author makes the practical deduction that this demonstrates how necessary it is to adopt a tonic and stimulant method in treating this disease.—*Archiv der Heilkunde*, 1873.

THE MEDICAL RECORD of London has changed its name to *The London Medical Record*. This is as it should be. There will now be no danger of confounding one journal with others of a similar name.

LEGAL INTELLIGENCE.

SUPERIOR COURT, MONTREAL.

May 31, 1873.

BEFORE JUDGE JOHNSON.

BOWKER vs. BEERS.—The parties are both dentists residing here; and the Plaintiff brings his action against the Defendant for having, with intent to injure the Plaintiff in his character personally and professionally, written and published in the March number of the *Canada Journal of Dental Science* certain commentaries on another article that had appeared in the January number of the *Canada Medical Journal*, signed by the Plaintiff. The *Canada Journal of Dental Science* is printed at Hamilton, in Ontario, but the publication by Defendant in Montreal is what is complained of in the present case, and it is proved that the *C. J. of Dental Science* was circulated here, and received by five witnesses, and also that the Defendant is one of the editors and publishers of it. This is all there is as to the fact of publication here. What is in issue under the 2nd plea, and under the circumstances, I hold it to be enough.

1st. The Defendant, by his plea, admits that he wrote the article complained of, and said that it was partly provoked and called for by the previous production of Dr. Bowker, to which it was an answer. The subject of this controversy was the use of amalgam by dentists for filling cavities in the teeth, and the Plaintiff commenced the discussion in the *Canada Medical Journal*. It cannot be said that it was not a fit subject for discussion in the interest of dentists and of their customers. The only ground of

complaint could be that the discussion was not conducted in a fit and proper manner, that the dispute ceased to be scientific and became personal.

The Plaintiff in the arricle that called forth the one complained of by his action had a perfect right to condemn the use of amalgam.

He used that right, but unfortunately he did not stop there. After exposing its noxious properties and effects, he says: "The question is often and naturally asked why this amalgam is so generally used by a certain class of dentists." The answer can be found in one or all of the following explanations:

1st. The cheapness of the material.

2nd. The ease and facility with which it is used, for it can be put into the most difficult cavities with as much ease as so much putty or wax.

3rd. It makes up for the want of skill and ability to use something better.

4th. From ignorance or the want of honesty.

The Defendant replied to this article in the *Canada Journal of Dental Science* in the same temper. Not content with refuting that part about the amalgam in point of fact, he says: "Dr. Bowker, you are an imposter; you yourself use this 'very article which you condemn in others.'" Now this is a libel like the first; but the first was a libel on the profession, while the second is one on Dr. Bowker. If he had considered himself libelled as a member of the profession, Beers might have sued the author, but he did not do so, but he libels again. It is to be observed that he is charged with a *wanton* and *malicious* libel. Now it cannot be considered such, but was written under provocation, and not wantonly or maliciously. This will go in mitigation of damages, which I have placed very low. Judgment for 50 shillings damages and costs of an action of the lowest class in the Superior Court. *A. d. W. Robertson* for Plaintiff; *Carter & Keller* for Defendant.—*Montreal Herald*.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, JULY, 1873.

NURSES.

Montreal is sadly in want of good nurses, and there is no good reason that such should be the case. Not only is there a want of trustworthy monthly nurses, but also of those who should attend the sick. A nurse that attends a fever case, or a patient suffering from a sharp attack of any disease, should not

take charge of a child-bed patient; nevertheless, such is frequently done in this city, although both patient and medical attendant have been entirely ignorant of the fact. Not long ago, we were asked by a nurse already engaged for an accouchment case, to be allowed, in the meantime, to take charge of two children suffering from scarlet fever.

We do not wish to infer there are no good nurses in Montreal, but they are very few, and, as a consequence, are always engaged.

A nurse not only requires to have intelligence, kindness and firmness, but she should be a good cook as well, a good cook for the sick and to be able to attend to her own duties without setting all the servants of the house "up in arms" against her. Until lately we thought the race of Sairey Gamp and Betsey Prig were extinct, but it was our misfortune to engage one who was highly recommended, and we discovered, to our disgust, that a little flask she carried about her was better attended to than our patient. She was a generous nurse, however, and rather an improvement on Sairey and Betsy, inasmuch as often as she partook of the contents of the flask, our patient was invited to do the same, and when told it was contrary to the doctor's orders, her answer was, "drat the doctor, he is only a young man and has no experience. I am an old woman, and have seen more babies born than he ever will." It is needless to say, our nurse was relieved of her duties, and allowed the liberty of offering her hospitalities to others.

There are many poor respectable women in Montreal who are quite capable of becoming excellent nurses, if they only had the training, and there are institutions in the city quite capable of affording them that training, if it were only brought before the authorities in the proper manner, and their co-operation asked. If this were done, the profession would be supplied with trustworthy nurses, both for the sick and their lying-in cases, and a means of livelihood offered to many a deserving person.

Dr. Thynne remarked, "that nurses, like poets, were born, not made," but a woman, if not born a nurse, by education can always be made one.

Montreal is large enough to support a training institution, and all that is wanted is a commencement to be made. An association could be formed of ladies and medical gentlemen, under whose government the institution could be placed.

No better plan could be followed than to copy the St. John's House institution of London. It is now almost self-supporting, and in a very short time such would be the case here.

Probably the gentlemen who are interested in the Western hospital will see the propriety of having such an institution attached to it.

BRANT MEDICAL ASSOCIATION.

The usual quarterly meeting of the "County of Brant Medical Association," was held in the Kerby Hotel, Brantford, on Tuesday, June 3rd. There were present Dr. Henwood, President; Drs. Griffin, Bown, Marquis, Philip, Lawrence, Cooke, Hipkins, Clarke, Teghart, Cole and Burt. There were also present as visitors: Dr. Ker, Galt; Dr. Bingham, Ayr; Dr. Jones, Hagersville; and Dr. Turnbull. The minutes of last meeting were read, and on motion confirmed with the additional clause in the following words, which was moved by Dr. Griffin and seconded by Dr. Lawrence, and carried, "it being understood, however, that this association did not at its last meeting intend to oppose the whole medical bill, but chiefly that part referring to the mode of levying the assessment."

Dr. Kerr, of Galt, gave an interesting description of a remedy introduced by himself many years ago, and which he and many other medical men had used with great success in dysentery and other affections. The ingredients and its Physiological action were explained at length, and which may be fully seen in an article by him in one of the numbers of the Glasgow Medical Journal for 1864. On motion, the thanks of the association were tendered to Dr. Kerr for his communication.

Dr. Jones, of Hagersville, was balloted for and accepted as a member of the association.

Dr. Philip read a paper upon cerebro-spinal meningitis, detailing the principal features of the disease as it manifested itself in Brantford and neighborhood, where it has prevailed to a considerable extent during the past four months. An interesting discussion ensued in which Drs. Henwood, Griffin, Bown and others took part, and detailed the result of their observations and mode of treatment.

A morbid preparation on occlusion of the posterior cerebral artery was shown by Dr. Clarke of Paris, but from want of time he deferred giving the history of the case which occurred in his practice until the next meeting of the association. Dr. Griffin reported the success which had been obtained by the Committee in carrying out the project of establishing a public dispensary for the sick poor of the town of Brantford. The Town Council had been generous in appropriating the necessary funds, and it would be in full operation on the 1st of July. The Committee

appointed at last meeting to draw up a tariff of fees to be submitted to the association for adoption, was requested to postpone reporting until next meeting. After the transaction of some routine business, the association adjourned to meet again on the first Tuesday in September.

CEREBRO-SPINAL MENINGITIS.

Dr. Perrigo of Montreal, reports having successfully treated a case of cerebro-spinal fever with Quinine and Tincture of Sumbul, while at the same time the bowels were kept rather loose. He has noticed that all those cases, in the present epidemic, where the bowels were kept well open either by the attendant or by the peculiarity of the case, have made good recoveries. He considers Sumbul equally good as a nerve stimulant with Musk, while at the same time it is not so liable to irritate the stomach. Sumbul is also more likely to be had pure, while it is very questionable whether any unadulterated Musk is in the market on this continent.

Dr. Perrigo merely mentions the fact of his having used Sumbul in this case, with the hope that some of the older physicians may be persuaded to give it a trial in their more extensive practices, and, some day, give the profession the benefit of their experience. Thirty minims of the Tincture along with one grain of Quinine was given every three hours.

Dr. Perrigo had another case, an infant of seven months, that died, where the same treatment was tried, but it had no fair trial as the parents were wretchedly poor and perfectly indifferent whether the child lived or died.—*Com.*

PERSONAL.

We are informed that Dr. Henry Nelson (cousin of Dr. Wolfred Nelson), after seventeen years practice in California, intends returning to Montreal and continuing his professional duties here.

Dr. André Latour, assistant Demonstrator of Anatomy in Bishop's College, left in the steamship of the 21st of June for Europe.

TO OUR SUBSCRIBERS.

With this number of the *Record* its first volume is completed. The experiment which we have made was a bold one—involving pecuniary liability to a considerable amount—but we felt convinced that the profession would sustain a journal more after the style of those published in London and New York

than any hitherto issued in Canada, and the result has fully proved the correctness of our belief. Commencing with a comparatively small circulation, and without any effort on our part, for we have not obtained a single subscriber through a paid canvasser, we close the volume with a *bona fide* list of subscribers almost four times as large as had the *Canada Medical Journal* when it ceased to be published, one year ago. We circulate in every Province in the Dominion, also to a limited extent in the Western States (among Canadian graduates) and along the border States. We hope to make the next volume even more practical than the present one, and earnestly solicit contributions of any kind from our friends. The title page and index for the present volume will be sent with the next number.

A few of our subscribers have not yet paid their subscriptions. We enclose accounts in this number, and respectfully ask for a prompt reply.

TO CORRESPONDENTS.

With our next volume we will commence a column "Answers to Correspondents," in which we will be happy to answer any enquiries that may be put to us.

Reviews.

Clinical Lectures on various Important Diseases; being a collection of the Clinical Lectures delivered in the Medical Wards of the Mercy Hospital, Chicago. By Nathan S. Davis, A.M., M.D., Professor of Principles and Practice of Medicine, and Clinical Medicine, in Chicago Medical College. Edited by Frank Davis, M.D., Chicago: J. J. Spalding & Co., 158 Clark Street, 1873.

This little work is made up of Clinical reports which appeared in the columns of the *Chicago Medical Examiner*. We have read the book nearly through, and can recommend it to our readers as one in which they will find a number of useful and practical hints. It is by no means an exhaustive treatise on Clinical medicine, but consists of lectures on a few of the more important diseases met with in hospital practice. The lecture on cerebro-spinal fever is especially interesting in view of the present epidemic of the disease in this city, and from the fact of the author's having passed through an epidemic in Chicago, during the months of February, March and April, 1872, witnessing forty cases in his own practice, besides a number of others in consul-

tation with other medical men. Four-fifths of the cases witnessed by Dr. Davis were among the poor and laboring classes of the city. Of the forty cases six were adults, between the ages of twenty and thirty years; ten between five and fifteen, and twenty-four between six months and five years. Like almost all observers Dr. Davis has been unable, in the course of his experience, to gather any evidence of the infectiousness or communicability of the disease. The lecturer ventures the following with regard to the pathology of the disease: "I have been led to regard the disease as consisting in an exaltation of the susceptibility or irritability of the structure of the cerebro-spinal axis, including the whole base of the brain, with diminished tonic or contractility of the blood-vessels. If the alteration of the property of susceptibility is intense, and extends directly to the centre of the excito-motory system, it cuts short life very speedily—sometimes in a few hours—without leaving visible alterations in the brain or its membranes. But if the morbid action be less intense, or involve less directly the chief excito-motory center, in the medulla oblongata, life may be prolonged until either recovery takes place or the vascular engorgement ends in effusion of serum, &c."

Dr. Davis' treatment of the first few cases which occurred to him consisted in the application of leeches to the temples and mastoid processes; cold to the head; mild cathartics; full doses of bromide of potassium, aided by chloral at night to procure sleep. His experience of these modes of treatment was decidedly unsatisfactory. He then bethought himself of the beneficial results obtained from the use of Calabar Bean in tetanus, and other forms of muscular rigidity from irritation of the mucous centres, and resolved to try it in this disease. The result, in a number of cases, was apparently quite favorable. If the author's views of the pathology of the disease be correct, we should expect that remedies which diminish nervous excitability and increase vascular tonic, to exert the most favorable influence over the active stages of its progress. Such medicines are calabar bean, cannabis indica, gelsemium, ergot of rye, bromide of potassium, etc. Dr. Davis' experience is adverse to the use of opium and quinine in the active stages of the disease.

The two lectures on the summer complaints of children are specially worthy of being read by the medical men of this city at this season of the year, as the author's experience of the extraordinary prevalence of these complaints in Chicago during summer is similar to our own.

The following are a couple of Dr. Davis' prescriptions for this complaint:—

R. Acid Carbohc crept.	grs. iii.
Glycerin. pur.	̄ ss.
Tinct. Camph. Co.	̄ j.
Aquæ	̄ iss.
Mix.	

Sig. Give twenty drops every half-hour until the vomiting ceases, then extend the time to every two hours.

R. Hydr. Chlor. Mit	grs. iv.
Pulv. Opii	gr. i.
Sacch. Alb.	grs. xxx.

Mix and divide into eight powders.

Sig. One every eight hours.

Dr. Davis frequently adopts the method in these cases of giving anti-emetic medicines immediately after each act of vomiting. He says: "The rule to give whatever medicine is designed to suppress the vomiting, in small doses, *immediately* after each act of vomiting, is one of much practical value. Vomiting is an act that cannot be perpetuated continuously, but must always occur in paroxysms, with an interval of greater or less length between them. Hence, if a dose of medicine is swallowed immediately after a paroxysm of vomiting, it will remain in contact with the mucous membrane of the stomach a few minutes, at least, before another effort at vomiting can be performed: During these few minutes, if the medicine is soluble, or already in solution, it will gain some effect, both on the nervous filaments and the capillaries of the mucous membrane; and a repetition of the dose immediately after each paroxysm of vomiting will soon accumulate an effect sufficient to destroy the morbid sensibility, and consequently stop the vomiting. But if we follow the wishes of the patients, and the inclinations of almost all nurses, by withholding the medicine after vomiting until the patient has rested a little," that little period of rest is just sufficient for the muscular coat to regain its contractility, and the mucous coat to pour out a new supply of serous fluid, and consequently the patient is all ready for another paroxysm of vomiting. Now, if the dose of medicine is administered, in nine cases out of ten it will be rejected almost as quick as swallowed, and the effect is lost." Dr. Davis advocates the same method in the use of enemata for the suppression of diarrhoea or dysentery. They should be administered as soon as possible after the bowels have been moved, while the rectum is empty. If we delay in giving

the enema, more mucous or serous fluid will have accumulated in the bowel, and the more readily will its introduction be followed by immediate expulsion.

In cases of arrest of the secretion of urine as so often occurs in these cases of diarrhoea in children, the author recommends a combination of small doses of sweet spirits of nitre and the acetate of potash.

Dr. Davis' prescriptions in this book contain a number of medicines which are rarely, if at all, used by practitioners in Canada. Such are phloridgine (an astringent tonic derived from the bark of the apple-tree), cimicifuga racemosa, gelsemium, semper-virens, etc. It is, perhaps, a matter for regret, that we are so conservative, and neglect to use medicines, the value of which, in proper cases, seems amply proved by the testimony of able observers. Having noticed some of the merits of this little book, it behoves us to speak of some grave defects.

A slovenly style is noticeable in many parts of the book, especially in the various formulas given, scarcely one of which is correctly written. There is hardly a prescription in the book in which the Latin names of some drugs, and the English names of others, are not jumbled together promiscuously. Thus, on page 163 will be found the following:— (we give the formula literally.)

R—Ol. Terebinth	̄ ii.
Ol. Wintergreen	20gtts.
Tinct. Opii	̄ ii
Pulv. Gum. Arabic	} aa ̄ iv.
White Sugar	
Rub together and add water	̄ iii.
Mix.	

Again, on page 158, we find

R. Quinia taunata	4 grs.
Pulv. Opii	1 gr.
Saccharum Alba	20 grs.

We had always thought that the Latin substantive *saccharum* was neuter and must have an adjective to agree with it in the same case. Not so, Dr. Davis, apparently, for the same error occurs throughout the book wherever the word is used. For these defects, of which he seems conscious, the editor tenders the very lame apology that the lectures were not given in one consecutive course, and reported by one amanuensis, but were delivered as parts of several annual courses in the hospital wards. We have, however, done with fault finding, and would only say to our readers, in conclusion, get the book by all means, it will repay a perusal.

A System of Oral Surgery, being a consideration of the Diseases and Surgery of the Mouth, Jaws and associated parts. By JAMES E. GARRETSON, M.D., D.D.S., Oral Surgeon to the Medical Department of the University of Pennsylvania. Illustrated with numerous steel engravings. Philadelphia: J. P. Lippincott & Co., 1873. Montreal: Dawson Brothers.

This volume has been on our table for several months, and we have purposely delayed noticing it in our columns, for the reason that soon after its receipt we observed in a cotemporary, a somewhat severe criticism of it. We were desirous of having ample opportunity to examine the volume, and so ascertain whether the strictures we have referred to were correct. This we have now done, and while we cannot but say that the volume is not as original—especially in illustrations—as we would wish it to be, yet it is an exceedingly valuable contribution to a special and extremely interesting department of surgery, and is not, in our opinion, deserving of the remarks we have referred to. There is, on the part of many, strong objections to dividing the work of the profession into so many separate branches; still there is no question that the tendency of the age is to specialties, and, oppose it as we may, this tendency, in our opinion, will increase. Believing this, as we do, we feel that this book is calculated to give information on a class of surgical diseases, concerning which there is, among many, comparatively little known. Dr. Garretson thus explains the object he has in view: "The author has had continuously in his mind the recognition of the important fact that in no department of medical science has there existed a hiatus, such as that found to day, between general Surgery and Dentistry—a lacking span truly in the bridge of practice. A patient with an oral disease of any complexity, trusting himself to the average dentist, meets with disaster, because of the absence of surgical knowledge and skill. Approaching from the side of medicine, he suffers alike from the want here of a special character of information, which has hitherto been looked upon as having alone relation to a speciality. To bridge this gap, by supplying the lacking span, has been the life-long labor of the author. * * * * if the dental practitioner learn from it that an acquaintance with the principles of medicine is necessary to the comprehension of oral surgery; and, on the other hand, if the general practitioner be led to perceive the necessity for a familiarity with that which hitherto has been deemed to belong exclusively to the province of

the dentist, that both may realize that oral surgery is a speciality, to which no man may bring learning and skill which shall not find abundant opportunity for their highest expression." Who will deny that this object is not a worthy one, and although, in some respects, there may be room for a hypercritical reviewer to pluck holes, we look upon the volume, taking it altogether, as one well calculated to help on the desire which is expressed in the quotation we have made. The book is elegantly got up, and would make a handsome and useful addition to the library of any physician or dentist.

Reports of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

At a meeting of this Society held on the 13th June, Dr. Howard gave an interesting paper on a few cases of Uterine Fibroids, that had occurred in his practice.

The first case was that of a woman, aged 30 years, where the growth was accompanied by severe hemorrhage and prostration. Iron, ergot, and injections of iodine, (as recommended by Dr. Savage,) failed to arrest the bleeding. The removal of the tumor was effected by passing a tape over it, and snipping through the base with a scissors. No serious after results occurred, and the patient made a good recovery. The growth was found, upon examination, to be very dense.

Case No. 2.—Patient aged 49, and married twelve years. Had long suffered from profuse menstrual flow and metorrhagia. Of late the flow was more severe, and failed to be arrested by astringents.

On examination a pear-shaped tumor was easily detected, pressing on the internal os.

This tumor was removed by an ecraseur.

Considerable hemorrhage followed its removal, which was checked by cold water, solution of perchloride of iron, and finally arrested by tampon.

The woman made a good recovery, without any serious drawback.

No. 3.—This case was very similar to the last. The woman had borne six children, the youngest now six years of age. Ergot and aromatic sulphuric acid checked the flow of blood, and allowed time for the polypus to pass into the vagina, where it was easily removed by the ecraseur. The pedicle was the size of a finger. The fourth day after operation had rigors, which were followed by fetid discharge from uterus. Under tonics and disinfectant injections the patient soon made a good recovery.

Case 4.—Sterile and long suffering from menorrhagia. On examination found two small polypii of nabothian glands, a little larger than a grain of wheat. These growths were removed by the scissors without difficulty; but were followed by an attack of pelvic cellulitis. The woman, however, recovered, and subsequently was under Matthew Duncan's treatment for similar growths, and with similar untoward after results.

Case 5.—In this case the patient had enjoyed good health up to December, '72, when she fell down stairs. Had head-ache, pains in back, &c., when, after a few days began to bleed freely. Was pale and weak.

On examination found neck of uterus obliterated; the os thin and dilated, which allowed the finger to pass without difficulty and feel the polypus. About the middle of January, the os being well dilated by sponge tents, the ecraseur was applied and a sessile tumor was divided at its base, which, however, necessitated division of the cervix before it could be removed from the uterine cavity. An attack of erysipelas of right side of face followed, but without any uterine complications, and patient was soon well.

Case 6.—Aged 30 years. Sterile; os enlarged and patulous. Tents were introduced, and after dilatation had been effected, a fibroid was felt projecting into cavity of uterus. The tumor was enucleated by the finger and removed by the vulsillum without any bad after results. The growth was the size of an egg, and imbedded about three-fourths of its extent in walls of uterus.

Case 7. Patient aged 36, sterile, and subject to profuse flows of blood. On examination several fibroids were felt, some outside and some inside of uterine walls.

Gave ergot and iron, and used injections of solution of iodine, as recommended by Dr. Savage of London. The strength of this solution is Iod. 3 j., Pot. Iod. 3 ij, Rect. Spirit ʒ ij, aq. ʒ vj.

Dr. CRAIK enquired whether or no any of the solution of iodine injected had penetrated into the peritoneal cavity.

Dr. FENWICK related a case in his practice (similar to No. 4 of Dr. H.) where he removed with the scissors fifteen or twenty small nabothian growths without any bad effects. Slight hemorrhage followed the operations, but the patient made a good recovery and subsequently bore two children, although previously sterile.

Dr. REDDY made some remarks about the symptoms of collapse which he has found to follow injections of iodine, although os had been thoroughly dilated.

Dr. TRENHOLME related the history of some five cases he had operated upon, which, in many respects, were similar to those brought forward in Dr. Howard's paper. All these cases made good recoveries, without any untoward after results. The value of the symptoms of pain and hemorrhage were dwelt upon as a means of diagnosing the position of the tumor. These symptoms are stated by Dr. Meadows to be correlative to each other. The hemorrhage being most severe in the sub-mucoid tumors, and most painful in the sub-peritoneal.

Dr. GRANT (of Ottawa) stated that uterine fibroids were very seldom met with in his city. He had seen but two cases in eighteen years' practice, and affected their removal without difficulty, after having well dilated the os by means of sea tangle.

Dr. HINGSTON related the history of two cases. In the first case the tumor was about six inches long and three inches in diameter, and attached by a broad pedicle to the fundus. It was removed by twisting it off with a cephalotribe, after being partially enucleated. The case terminated unfavorably. The second case was a small round tumor imbedded in the wall of the uterus. After dilating the os he applied the lithotripsy forceps, and then enucleated it without difficulty. The case ended most satisfactory without any unfavorable symptoms.

In this connection Dr. H. strongly favored enucleation, in preference to the use of the ecraseur, as the latter method endangered the integrity of the uterine wall, especially when traction was made upon the tumor.

Dr. TRENHOLME remarked that traction upon the fibroid was both unsafe and unscientific. The proper way was to follow the now recognized method of bringing the uterus well down upon the perineum and thus render the cavity of the organ accessible for manipulating the instruments.

A vote of thanks was then given to Dr. Howard for his interesting paper. T.

BIRTH.

At 65½ St. Antoine Street, on Friday, the 13th June, the wife of Dr. Slack, of a daughter.

At Bermuda, on the 2d May, the wife of Dr. W. F. C. Bartlett, R.N., of a son.

At Franklin Centre, Q., on the 18th June, the wife of A. A. Fergusson, M.D., of a daughter.

MARRIED.

At Christ Church Cathedral, on the 4th June, by the Right Rev. the Metropolitan, assisted by the Rev. Canon Baldwin, Malcolm Roscoe Meigs, Esq., M.D., to Harriet Louisa, youngest daughter of the Rev. George Slack, M.A., of Bedford, P.Q.

DIED.

In Montreal on the 31st May, Dame Adeline Loranger wife of Edmond Robillard, M.D., Treasurer of the Canadian Medical Association.

In Montreal, on the 18th June, Susanne Peltier, eldest daughter of Hector Peltier, Esq., M.D., Edin., Professor of Institute of Medicine, Victoria College (Montreal Branch).

At St. Mary's, Ont., on the 18th April, Maggie Notman wife of D. H. Harrison, Esq., M.D.

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EDITOR:

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VOL. II.

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CONTENTS.

	Page		Page
Original Communications.		Chloroform in Heart Disease.....	189
Address delivered before the Canada Medical Association, 1873, by J. A. Grant, M.D.....	25	College of Physicians and Surgeons of Lower Canada.....	71, 264
Address in Surgery, Canada Medical Association, 1873, by Wm. Hingston, M.D., &c.....	49	Convocation of McGill Medical Faculty.....	211
Bogart, Irvine D., M.D., case of double placenta....	122	Cremation of the Dead.....	264
Campbell, F. W., M.D., L.R.C.P., Lond. three cases of True Membranous Croup. Tracheotomy in one case.....	218	Death of Sir Henry Holland.....	117
Chanonhouse, John, M.D., case of Pleuro-Pneumonia, Paracentesis.....	146	Death of the Siamese Twins.....	143
Chanonhouse, John, M.D., Acetate of Lead in post partem Hemorrhage.....	101	Disease mistaken for Drunkenness.....	117
Ferguson, A. A., M.D., C.M., cases of Cerebro-spinal Meningitis.....	1	Elixir Ferri et Calcis Phos. Co.....	23
Gardner William, M.D., on the application of Nitric Acid to the interior of the Uterus.....	267	Flint's Practice.....	45
Hart, David A., Valedictory Address on behalf of Graduates in Medicine, Bishops College.....	193	Footing Dinner of McGill Students.....	96
Hingston, W. H., M.D., L.R.C.S., Edin, on Stone in the Bladder.....	97	Government Grants to Medical Schools.....	142
Kennedy, R. A., M.D., case of Embolism of the Left Middle Cerebral Artery.....	98	How to check Coughs.....	239
Kennedy, R. A., M.D., case of Membranous Croup. Tracheotomy.....	217	Livingstone Scholarship.....	264
Kennedy R.A., M.D., on the disposal of Sewage matter.....	265	London, Ont., Medical Society.....	118
Lafontaine, Charles, M.D., Acute Pleuribus, terminating in Suppuration, Operation.....	100	Louis Boyer, M.D.....	142
Perigo, James, M.D., M.R.C.S., Eng., Headache Treatment, by Guarana.....	169	Maternity Hospital, Montreal.....	72, 116, 167
Perigo, James, A.M., M.D., M.R.C.S., Eng., on Morbus Coxarius.....	56	Medical Department Canadian Institute, Toronto	143
Simpson, Thomas, M.D., Abstract of a Case of Dry Gangrene.....	196	Medico-Chirurgical Society of Montreal.....	92, 116
Slack, G. F., M.D., M.R.C.S., Eng., Two years and a half in a London General Hospital.....	241	Memoir of Professor Syme.....	212
Trenholme, E. H., M.D., B.C.L., a case of Myeloid Tumor of the metatarsal bone of great toe.....	28	Montreal Dispensary.....	239
Trenholme, E. H., M.D., case of Apoplexy in a woman eight months pregnant, Cæsarian section.....	145	Montreal General Hospital.....	94, 239, 264
Trenholme, E. H., M.D., on a case of Cerebro-spinal Meningitis.....	121	Montreal Medical Schools.....	190
Trenholme, E. H., M.D., &c., on a case of Ovariectomy.....	73	Montreal School of Medicine and Surgery.....	95, 142
Trenholme, E. H., A.M., M.D.C.M., B.C.L., on a case of Laryngotomy.....	1	Newspaper Puffery.....	189
University of Bishops College Medical Faculty, introductory lecture to Third Session, by Professor Trenholme.....	49	Notice to Graduates.....	72
University of McGill College, Medicine Faculty, introductory lecture by Professor Howard.....	64	Openings for Medical Men.....	23
		Opening of the Medical Schools in Montreal.....	72
		Physician's Fees in New York.....	188
		Physicians Visiting List.....	96
		Poisoning from Vin. Colchici.....	140
		Quebec College of Pharmacy.....	211
		Report of Rockwood Lunatic Asylum.....	44
		Skin of a white man grafted in a colored man.....	95
		Small Pox.....	142
		Surgical Item.....	168
		The Canadian Medical Association.....	22
		The Canadian Medical Times.....	143
		The Iodo-Bromide Calcium Compound.....	116
		The late Dr. Chas. Smallwood.....	141
		The oldest Teacher of Medicine.....	167
		The Siamese Twins.....	188
		The Social Evil.....	187
		To Correspondents.....	22, 116, 142, 189
		To Delinquent Subscribers.....	22
		To our Exchanges.....	142, 190
		To our Readers.....	21
		To our Subscribers.....	91, 143, 168, 189, 239, 264
		Toronto Eye and Ear Infirmary.....	190
		Typhoid Fever in Milk.....	93
		Western Hospital, Montreal.....	72, 142, 239, 264
		Hospital Notes.	
		Acute Articular Rheumatism.....	245
		Bright's Disease.....	69
		Burns.....	254
		Cholera Infantum.....	70
		Delirium Tremens.....	70
		Diphtheria of Wounds.....	69
		Gleanings.....	105
		Glycerole for Chapping.....	69
		Gonorrhœa.....	284
		Hyperpyrexia.....	69
		Intermittent Fever.....	68
		Irritable Stomachs.....	245
		Night Sweats of Phthisis.....	245
		Pneumonia.....	245
		Removal of Breasts.....	156
		Ulcers.....	254
		Personal	
		Personal,	23, 45, 72, 96, 118, 143, 168, 190, 212, 240, 264
		Births, Marriages and deaths, 24, 48, 96, 120, 144, 168, 192, 216, 240, 264	
Correspondence.			
Letter from "a Victim".....	75		
" Diogenes, jun.....	169		
" Dr. Lawrence.....	29		
" Dr. W. Nelson.....	30		
" Grumbler.....	29		
" R. T. Godfrey, M.D., London.....	66		
" Dr. Perigo.....	101		
" W. A. C.....	146		
Editorial.			
A Bad Case.....	191		
A Father Kills his own Child.....	94		
American Medical Schools.....	190		
Apology.....	118		
A self Sacrifice to Medical Research.....	96		
A Small-pox Hospital for Montreal.....	114, 208		
Bishops College Medical Faculty.....	118; 210		
Bloodless Amputations.....	92		
Canadian Medical Association.....	44, 264		
Citrate of Magnesia under Difficulties.....	167		

Progress of Medical Science.	Page		Page
A Cure for Epithelial Cancer.....	89	Digitalis and Chloral in Delirium Tremens.....	111
A Discriminating Physician.....	165	Digitalis in Acute Diseases.....	13
A knife swallowed and passed through Abdominal Wall.....	198	Digitalis in Dropsy.....	90
A London Letter.....	76	Dilatation of Cervix Uteri in Dysmenorrhœa.....	107
A Physician's Diary of Business.....	21	Diseases of Chest in Children, Treatment by Blisters	127
A strange suggestion.....	165	Doctor and Debtor.....	139
A bit of Expert Testimony.....	196	Early Clinics.....	244
Abnormal behaviour of Albuminous Urine under tests.....	91	Effect of Carbolic Acid on the Urine.....	91
An Abortive Method of Treating Coryza.....	126	Effect of Senna on the Urine.....	84
Abortive Action of Quinine.....	198	English Midwives.....	21
Abortive Treatment of Boils.....	138	Emetics by Subcutaneous Injection.....	256
Acetic Lotion for Baldness.....	200	Ergot in Cancer.....	12
Action and uses of Croton-chloral.....	135	Ergot in Nervous Diseases.....	184
Administration of Perchloride of Iron.....	112	Ergot in the treatment of Nervous Diseases.....	105
Administration of Podophyllin.....	111, 186	Ergot in Injections in Prolapsus Ani.....	227
Ammonia Carbonate in Scarlatina.....	39	Erysipelas treated Verat Virid.....	184
An Improved Means of Plugging the Posterior Nares.....	16	Eustachian obstruction in Children.....	196
Anticipation and Treatment of Post-partem Hæmorrhage.....	136	External Application of Chlorate of Potash in Ulcerated Carcinoma.....	19
Anticipation of Post-partem Hæmorrhage.....	174	Extract from Eclectic Journal.....	244
Application of Cold in Scarlatina.....	135	External Treatment of Varicose Veins.....	227
A Quarter Down.....	252	Expectorant Mixture.....	238
Artificial rest in Pleurisy.....	252	Extensive use of Ether for Anesthesia.....	199
Arsenic in Furuncular Diathesis.....	255	Fatty degeneration of the Heart, causing sudden death after Delivery.....	255
Arsenic in Menorrhagia and Leucorrhœa.....	19	Fetid Coryza.....	230
Bed Sore, Clinical Lecture.....	7	Fibroid Tumour cured by Chloride of Ammonium	252
Beef tea.....	88	For a Corn on the Toe.....	256
Believers wanted.....	163	For Chafing of Infants.....	114
Belladonna plaster in Vomiting.....	177	Formula for Coryza.....	114
Biliary Calculus treated by Choleate of Soda.....	112	Formula for Neuralgia.....	257
Biliousness.....	198	Formula for Tape-worm.....	256
Boils Abortive Treatment.....	90	Fortnightly Hæmorrhage during Pregnancy.....	197
Bromide of Potassium in Epilepsy.....	252	Fractures on the Neck of the Femur.....	254
Bromide of Potassium in Gonorrhœa.....	246	Freckles.....	71
Burns, Recipe for.....	112	Freckles.....	209
Cancer of the Breast.....	165	Frontal Headache due to falling of Barometer.....	138
Capillary Bronchitis.....	179	Garments made Water-proof.....	90
Case of Spasmodic Dysmenorrhœa.....	182	Glycerole for Chapping.....	113, 200
Cauterization of the Uterine Cavity.....	176	Glycerine of Borax in Facial Erysipelas.....	43
Cauterization of the Uterus.....	207	Glycerine in disguising Medicines.....	89
Chloral Hydrat and Camphor—Croton Chloral.....	258	Gordenio.....	21
Chloral and Camphor in Neuralgia.....	253	Guarana in Sick Headache.....	159
Chloral as a Topical Application for Bed Sores.....	114	Hæctic Fever of Phthisis.....	114
Chloral, Precautions in using.....	88	Hooping Cough.....	227, 199
Chloral, as an Anæsthetic during Labour.....	220	Hops as an External Anodyne.....	17
Chloroformization during Sleep.....	164	How to administer Large Injections.....	186
Chlorate of Potash to prevent Salivation.....	178	How to Cough.....	18
Chronic Sore Throat.....	243	How to swallow a Pill.....	199, 113
Chronic Dysentery, Chlorate of Potash and Glycerine Injections.....	85	How to use up Useless Dogs and Cats.....	87
Citrate of Iron and Bismuth in Dyspepsia.....	13	Hydrocyanic Acid in Delirium Tremens.....	110
Clinical Lecture on Ch. Albuminuria.....	125	Hypodermic Syringe and Abscesses.....	255
Clinical Lecture on Chronic Corporeal Endemittitis.....	79	Hypodermic use of Carbolic Acid.....	207
Clinical Lecture on Seborrhœa Capitis.....	235	Iced Water Enemata in Dysentery.....	256
Clinical Lecture on Sore Nipples and Mammary Abscess.....	77	Importance and Dangers of Rest in Phthisis.....	174
Clinical Lecture on Varicose Veins.....	171	Impregnation without Intromission.....	165
Colli's Fracture, Clinical Lecture.....	5	Improvement in administering Perchloride of Iron	113, 139
Combination for Ch. Diarrhœa.....	43	Incontinence of Urine.....	113, 237, 255
Convulsions cured by Injection of Atropine and Morphia.....	177	Infantile Aural Catarrh.....	259
Convulsions during Labour.....	137	Infantile Convulsions.....	30
Convulsions in an Infant produced by a drinking Nurse.....	20	Infantile Convulsions due to an Intemperate Nurse	87
Convulsions treated by Chloroform.....	18	Infantile Enteralgia.....	40
Corns.....	177	Infleshed Toenail.....	15
Cough from Elongated Uvula.....	223	Injections of Iodine in Bronchocele.....	186
Croup.....	43	Instant death from Carbolic Acid.....	20
Cure of Ch. Gonorrhœa and Gleet by Ice.....	246	Intercostal Neuralgia in Women.....	222
Cure for Toothache.....	196	Internal Disinfection in Typhoid Fever.....	166
Death from Lancing the Gums.....	257	Iodide of Potassium and Carbonate of Ammonia in Syphilis.....	163
Death-rate of various Cities.....	88	Iodide of Potassium in Syphilitic Skin Diseases.....	43
Delirium Tremens, Prognosis of.....	19	Iodoform in Chancreids.....	252
Delivery of Placenta by Supra-pubic pressure.....	110	Jaundice, Pneumonia and Pleurisy.....	122
Division of Spinal Cord in the Neck.....	237	Lacerations of the Perineum.....	82
Diagnosis of Ovarian Tumours.....	160	Laxatives.....	178
Diarrhœa of Teething Children.....	111	Lecture on Chronic Cervical Metritis.....	67
Diarrhœa in teething.....	173	Lime baths in Membranous Croup.....	83
Diet of Diabetes.....	205	Liniment for Acute Articular Rheumatism.....	238
		Liquid nourishment for Sick Stomachs.....	139, 91
		Liquor Picis Alkalinus.....	173, 114
		Local Applications in Neuralgia.....	255
		Lotion for Baldness.....	113
		Lotion for Fetid Feet.....	207
		Lotion for Freckles.....	113

	Page		Page
Magnesia as a Surgical Dressing.....	111	Subcutaneous Injections.....	112
Manipulation in Treating Sprains.....	238	Successful Transplantation of a Rabbit's Conjunctiva to the Human Eye.....	17
Means Necessary to Prevent the Spread of Zymotic Diseases.....	159	Sulpho-vinate of Sodium in Constipation.....	20
Medical Items.....	191	Sulphur in the Treatment of Acne.....	237
Medical Treatment of Children.....	172	Surgical Hints, by a late House Surgeon.....	131
Methods of Surgical Diagnosis.....	156	Swallowing a Bell.....	166
Mint in suppressing Milk.....	164	Sweet Oil as a Dressing for Wounds.....	252
Morbid Sweating of the Feet.....	256	Tedious Labour from Debility, Treatment.....	137
Morphia and Cimicifuga in Puerperal Convulsions	16	Tedious Labour from Debility and its Treatment...	244
Naevi Cured by Monsel's Solution.....	20	Tedious Labour and its Treatment.....	260
Neuralgia in Infants.....	177	The Face and its Infirmities.....	256
Neuralgic Pain in the Liver.....	109	The Injection of Perchloride of Iron in Puerperal Hemorrhage.....	10
New Mode of giving Cod Liver Oil.....	87	The Styloid Muscles and Anesthetics.....	247
New Operation for Aneurism.....	90	The Value of Croton-Chloral Hydras.....	133
New Treatment of Cancer.....	227	Therapeutic Review.....	18
New York Physicians.....	111	Therapeutical Notes, Sykosis, Coal Tar for Wounds.....	200
Nitric Acid in Hooping Cough.....	185	Therapeutical Value of the Sulphides.....	206
Nocturnal Incontinence.....	9	Thumb Sucking.....	166
Nocturnal Muscular Cramp.....	207	To Clear the Throat of Fish Bones.....	114
Novel use of Stomach Pump.....	139	To Disguise Castor Oil.....	164, 197, 114
Obituary Dr. Forbes Winslow.....	190	To Restore Colour to Fabrics.....	120
On Continuous Discharges after Delivery.....	86	Treatment of Acne.....	38
Observations on Purpura.....	225	Treatment of Acute and Chronic Bright's Disease..	2
Observations on Sleeplessness.....	148	Treatment of Asthma.....	113
Obstinate Vomiting of Pregnancy cured by Bromid of Potassium.....	164	Treatment of Biliary Colic.....	147
On Ovarialgia.....	36	Treatment of Burns and Scalds.....	200
On Retention of Urine.....	91	Treatment of Cerebro-Spinal Fever.....	154
On Simple Vertigo.....	70	Treatment of Cerebro-Spinal Meningitis.....	253
On Sulphide of Potassium, Sodium and Calcium...	237	Treatment of Ch. Cystitis.....	197
On the Prevention of Metritis.....	132	Treatment of Chronic Dysentery.....	42
Onychia Maligna.....	200	Treatment of Chronic Eczema of the Genitals.....	71
Oysters and their Digestive Property.....	110	Treatment of Condylomata.....	112
Painless method of applying Nitric Acid.....	252	Treatment of Diptheria by the Vapour of Iodine...	89
Pathognomonic sign of Pertussis.....	257	Treatment of Disease in Children.....	108
Pathological Dentition.....	81	Treatment of Dysmenorrhœa.....	14
Pathology and treatment of Heat Apoplexy.....	175	Treatment of Enlarged Scrofulous Glands.....	173
Pemphigus.....	198	Treatment of Fissures of the Nipple.....	20
Pepsin in Oysters.....	139	Treatment of Fractured Clavicle.....	48
Pernanganate of Potash in Oxaluria.....	196	Treatment of Functional Derangement of the Liver	223
Peruvian Skulls.....	20	Treatment of Gall Stone.....	109
Phimosis.....	8	Treatment of Ganglions.....	259
Phosphatic Food in Debility.....	107	Treatment of Glandular Affections.....	104
Phosphoric Emulsion.....	199	Treatment of Granular Lids.....	227
Phosphorous in Neuralgia.....	163, 185	Treatment of Hooping-Cough.....	177
Phytolacca in Inflammation of Mammary Glands...	107	Treatment of Imperforate Anus.....	183
Pill for Gastralgia.....	17	Treatment of Inflamed Breasts.....	17
Play and afterpiece.....	200	Treatment of Lupus.....	257
Poem—Rip Van Winkle.....	214	Treatment of Naevi.....	112
Poisoning by Chloral.....	256	Treatment of Nervous Aphonia and Chronic Pharyngitis.....	16
Post-partum Hemorrhage.....	151	Treatment of Obstinate Constipation.....	84
Preventive treatment of Post-partum Hemorrhage..	201	Treatment of Otorrhœa.....	247
Psoriasis treated by Acetic Acid.....	113	Treatment of Orchitis with Nitrate of Silver.....	138
Quinine and Blisters in Pneumonia.....	200	Treatment of Pityriasis Rubra.....	255
Quinine by the Rectum.....	71	Treatment of Pneumonia.....	14
Quinine Pill Mass.....	166	Treatment of Poisoning with Chloral.....	254
Raw Meat in Phthisis.....	186	Treatment of Psoriasis.....	43, 17
Recent Therapeutics.....	85	Treatment of Scarlet Fever.....	42
Recurrent Herpes.....	224	Treatment of Syphilitic Warts.....	178
Remedy for Ch. Hoarseness.....	199, 166	Treatment of Syphilis.....	226
Removal of Glass Stoppers.....	113-199	Treatment of Tinea Capitis.....	177
Remedies for Furunculosis.....	139	Treatment of Threadworms.....	253
Reports of Societies.....	45	Treatment of Ulcers of the Leg.....	181
Reviews.....	119, 144, 191, 213	Treatment of Whooping Cough.....	43
Ringworm in Children.....	164	Tribute to the Doctors.....	76
Rules for Feeding Babies.....	194	Turpentine in Pyæmia.....	263
Rupture of Axillary Artery in Reducing a Dislo- cated Shoulder Joint.....	19	Ulcers. New Method for Healing.....	106
Rupture of the Esophagus.....	43	Urethral fever from Catheterism.....	226
Scarification of the Gums.....	109	Urethral Suppositories in Gonorrhœa.....	21
Scheme for the Examination of the Urine.....	248	Urgent Dyspnœa after Labour.....	41
Sciatica.....	20	Utero-Placental Vacuum.....	20
Shock and Syncope.....	133	Value of Guarana in Ch. Rheumatism.....	253
Sinapisms.....	113	Version, Hick's Method.....	19
Sinapisms.....	200	Vomiting of Pregnancy.....	186
Snuff for Facial Neuralgia.....	139	What it Costs to Support New York Hospitals.....	138
Sodiad Bromide as a Nervous Sedative.....	70	Zinc Oxide for Night Sweats.....	128
Some of the Causes of Hæmoptysis.....	102	Zinc Oxide in Infantile Diarrhœa.....	61
Specialties.....	71		
Styptic Collodion.....	139		

Original Communications.

A case of Laryngotomy. By E. H. TRENHOLME, M.A., M.D., C.M., B.C.L., Professor of Midwifery and the Diseases of Women and Children, University of Bishop's College.

Read before the Medico Chirurgical Society of Montreal.

At 4 a.m., June 18th, 1873. I was called out of bed, and on opening the door admitted to my study Mrs. N., of N. Street, in a state of aphasia and apparently moribund condition from want of breath.

How the patient managed to reach my door I cannot understand, but I suppose the energy of desperation and the assistance of a cousin who accompanied her enabled her to do so.

I learned by signs and scarcely audible articulations that she was choking and dying. Placing her on a chair I sent a messenger for my friend Dr. Kennedy, and prepared everything for the operation of Laryngotomy which was performed as soon as he arrived.

The incision was made through the skin and cellular tissue to about $\frac{1}{2}$ an inch in extent over the cricothyroidean space, and so soon as the hemorrhage, which in this case was considerable, had abated, the membrane was divided to a sufficient extent to admit of the introduction of the tracheotomy tube, which I now show you.

The completion of the operation was followed by immediate relief. As the morning was cold a shawl was wrapped around the lower part of face and neck, and the woman taken home in a carriage. Twice on her way she uncovered her neck in her anxiety to direct the course of the driver; an imprudence strictly forbidden, and which I feared might be followed by serious consequences.

The inner tube of the instrument was changed and cleaned several times during the day, the room kept from drafts, but warm and comfortable. The day and night of the operation were passed in comparative ease and comfort.

June 19th, was sent for early this a.m., as patient after having a good night was troubled for want of breath, and complained of pain in and above larynx.

The tube was cleaned and seemed to give more ease. Carefully examined lungs, but found no evidence of congestion. Skin was rather hard and dry, so I placed her on tr. aconite.

At 11 a.m. saw patient again in consultation with Dr. Howard, when the larynx was examined by the laryngoscope and found to be most intensely con-

gested and the vocal cords considerably thickened. The day and following night were passed in considerable comfort and freedom from pain, except in the immediate side of the larynx, especially on the left side. Could swallow with a little difficulty all kinds of fluid food—applied Solution of perchloride of iron to throat and larynx.

20th June—Complains of more pain in left side of larynx, respiration somewhat labored and shallow. A little bloody mucus passes through canula. Carefully examined lungs, but find no pneumonia.

21st—Early this a.m. about 4 o'clock, after a restless night and much pain in larynx, was almost suffocated by a sudden discharge of about one ounce of bloody mucus and pus, which discharge was preceded by "a sound of something giving way," sufficiently loud to be distinctly and loudly heard by attendants.

The abscess (for such I take it to have been) of the larynx was chiefly discharged through the artificial aperture, although a considerable amount escaped by the mouth..

After the violent spasms and coughing caused by the presence of the fluid in the tubes had abated, the patient felt much easier than heretofore, and no longer was distressed by the pressure of the "lump" in the larynx, and could swallow much easier.

The daily brushing out of the larynx is continued. The aconite omitted; and placed on tr. ferri. mur and phos. acid.

23rd—So well and throat much less sensitive that I removed the tube, and allowed patient to breathe both by mouth and artificial aperture.

Without extending details it may suffice to say that the woman improved every day, and that by 1st July the respiration was entirely normal, the laryngeal opening being quite healed up.

I may add that as my patient is of a tubercular family, and exhibiting the diathesis herself in a marked degree, I have placed her on cod liver oil and syrup of iodide of iron.

Cases of Cerebro-spinal Meningitis. By A. A. FERGUSON, M.D., C.M., Franklin, Q.

On Tuesday, Feb. 14th, 1873, I was summoned to see F. U., a boy aged 15 years. Was informed, that on the preceding morning he had complained of headache, but was able throughout the day to play with the rest of the children; that at eight o'clock that evening he suddenly fell down, was immediately lifted up and found to be unconscious, and that he had remained in that condition all night.

Upon my arrival, I found the patient lying in bed

and perfectly unconscious; pulse intermittent; pupils unequally dilated; power of deglutition lost, and the urine and stools passed involuntarily. Diagnosed it to be apoplexy, and prescribed accordingly. He died about twenty-four hours afterwards.

Case 2.—Miss T., aged 16 years, was seized with severe headache on the 18th February. Being neighbours to the above family, and dreading a similar case, they sent for me immediately. On arrival I found the patient complaining of severe pain in the head, conjunctiva congested; tongue coated; pulse 100. Ordered cold applications to the head. Hydrarg. sub. mur. x grs., to be followed an hour after by ol. ricini i ʒ. A solution of brom. pot. xx. grs. to the ʒ; a tablespoonful every three hours.

Feb. 19.—Had passed a restless night; pain in head still intense but intermittent. Complains of the pain running down the back of her head and along the spine, thence shooting through her limbs. Has some difficulty in turning her head, and it seems to be somewhat retracted. Diagnosed cerebro-spinal meningitis.

The treatment adopted was brom. pot. and tr. digitalis. The preparations of opium, the most preferable of which I found to be the pulv. ipecac co; a cathartic every second day; blisters from the occiput down along the spine; a light nutritious diet.

Miss T. recovered in four weeks.

Cases 3 to 8. Ages 6 to 12 years—only one male. Treated as case 2, and recovered in from one to three weeks.

Case 9.—Miss T., aged 16 years. Case similar to and treatment same as No. 2, but when convalescence had apparently been established, she was seized with a relapse and died in fifth week.

Case 10.—Miss H., aged 15 years. Disease severe. Treatment, pulv. ipecac co, cathartics, and early applications of emplastrum lyttæ. Convalescent in second week; improper food twice occasioned a relapse, but she subsequently made a good recovery.

Case 11.—Child 7 months. Treatment, syrup. pot. brom. tr. camph. co, blisters. Died third day.

Remarks.—Case 1, instead of being apoplectic, had probably been cerebro-spinal meningitis in its congestive and most malignant form. Cases 2, 9 and 10 were somewhat less severe in character, and the remaining cases were still a shade milder.

Of the remedies prescribed the pulv. ipecac co. stood foremost. Given in the evening in doses of x. to xv. grs., the patient passed a comfortable night; but if omitted, the night was spent in a restless, sleepless state, and dawn found the

patient feverish and delirious. If in this condition x. grs. of Dover's powder were administered both the fever and delirium vanished. Cathartics were generally given every second morning, and on the night preceding their administration, a few grs. of hydrarg. sub. mur or hydrarg. cum cretâ.

The bromide alone produced no perceptible effect, but when given in conjunction with the pulv. Dov. seemed to increase the calmative and anodyne power of that drug. In case 10, no bromide was used; quinia was tried in one or two cases, but seemed only to aggravate the symptoms. Of local applications I found the emplastrum lyttæ, frequently repeated, the most beneficial. Cold, either in the form of douche, icebag or compress, was in the majority of cases neither agreeable to the sensations of the patient nor productive of any relief.

Progress of Medical Science.

ON THE TREATMENT OF ACUTE AND CHRONIC BRIGHT'S DISEASE.

By George Johnson, M.D., F.R.C.P., Physician to King's College Hospital, Professor of Medicine in King's College, London, etc. [British Medical Journal.]

I adopt the definition given in the *Nomenclature of Disease* published by the Royal College of Physicians: "Bright's disease is a generic term, including several forms of acute and chronic disease of the kidney, usually associated with albumen in the urine, and frequently with dropsy, and with various secondary diseases resulting from deterioration of the blood." The term Bright's disease is nearly, but not quite, synonymous with renal albuminuria.

The causes of renal albuminuria arrange themselves in two main divisions:

1. A mechanical impediment to the escape of the venous blood from the kidney, as from disease of the heart or lungs; the pressure of dropsical fluid in the abdomen; sometimes probably the pressure of the gravid uterus.

2. An abnormal condition of blood is by far the most frequent cause of albuminuria. Thus albuminuria occurs not infrequently as a result of scarlatina, diphtheria, erysipelas, typhus and enteric fever, pyæmia, cholera, measles, purpura, gout, etc. The albuminuria which sometimes occurs during the early stage of pregnancy is probably a consequence of blood changes associated with that condition; while that which occasionally follows parturition is, in all likelihood, a result of absorption of septic materials from the uterus.

Thus, albuminuria may result from a primary mechanical hindrance to the movement of blood, or from a primary change in the quality of the blood. On the present occasion I shall exclude from consideration that class of cases in which albuminuria is

a result of a mechanical impediment to the circulation, and consequent passive congestion of the kidney. My remarks will have reference only to the more numerous second class of cases—cases of albuminuria the result of abnormal states of blood. I shall endeavor to make my remarks as practical as possible, with only so much of reference to pathological theory as may serve to guide or to explain practice.

The extreme frequency of renal disease is a physiological result of the kidney forming one of the main channels by which effete and noxious materials are cast out of the circulation. During the process of excretion, the kidney-tissues—primarily the gland-cells, secondarily the blood-vessels—undergo structural change. A leading principle of treatment is to lessen as much as possible the excretory work of the kidney, more especially in cases of acute Bright's disease. The main points are—rest in bed, in a room of moderate uniform temperature; a carefully-regulated and a somewhat scanty diet; the adoption of means to promote a free action of the skin and bowels.

In all cases of acute Bright's disease, rest in bed is an essential part of the treatment. In a large proportion of cases, this with a scanty diet will suffice for the cure. The diet may consist of milk alone, if it suits the patient's stomach, or milk with an egg or two in the course of the day, or with the addition of beef-tea or other animal broth. Under this regimen the urine soon becomes copious, while the albumen diminishes and gradually disappears.

The copious flow of urine which usually occurs during convalescence from acute Bright's disease is thus explained. During the acute and congestive stage of the renal disease, the constituents of the urine—both solids and liquids—have accumulated in the blood, and have thence been effused into the areolar tissue and into the serous cavities. Now, urea is a most powerful diuretic. When injected into the veins of a dog, it quickly excites a copious flow of urine; and no sooner is the inflammatory congestion of the kidney removed, and thus the freedom of the renal circulation restored, than the urea retained in the blood begins to exert its natural diuretic action upon the kidney. The copious flow of urine thus induced speedily removes the accumulated urinary solids and water from the blood, the areolar tissue, and the serous cavities, into which they had been effused, and thus the dropsy is cured.

This abundant flow of urine occurs without aid from diuretics or drugs of any kind. I have seen it occur while a bread-pill or colored water was given as a placebo. Stimulating diuretics, such as squills, or cantharides, or turpentine, would be injurious, by increasing congestion of the kidney. The best diuretics in such cases are those means which tend to lessen renal congestion—dry cupping or hot fomentations over the loins, hot air or water-baths, purgatives, and a scanty diet, with a free use of diluent drinks—one of the best and pleasantest drinks being the "imperial drink," made with cream-of-tartar and lemon.

When the renal congestion is extreme, as shown by the scanty secretion of highly-albuminous urine,

local bleeding by leeches or cupping on the loins is often extremely useful. If by the abstraction of a few ounces of blood from the loins we relieve the renal congestion, we shall check the rapid destruction of blood-constituents which results from uræmia; moderate local bleeding, therefore, tends to economize blood, and to prevent its waste.

It has been asserted that cupping or leeching the loins can help an inflamed kidney no more "than if the blood had been taken from the arm or from the nape of the neck." But this, surely, is a mistake. The lumbar arteries, which supply the integuments of the loins, arise from the abdominal aorta, close by the origin of the renal arteries; and when leeches or cupping-glasses draw blood through the skin of the back, it is certain that the diminished pressure within the lumbar arteries will divert a certain quantity of blood from the neighboring renal arteries. The same principle explains the good effects of leeching in cases of pericarditis. The internal mammary artery sends deep branches to the pericardium, and superficial branches to the intercostal spaces and the skin. By the application of leeches over the heart, we abstract blood from the integumentary branches of the internal mammary artery, and thus divert a portion of blood from the deeper pericardial branches. The blood will as surely take the course indicated by diminished pressure within the vessels as the water in a pump will, up to a certain height, follow the rising piston. It may be thought that the quantity of blood thus diverted is very small: so, in the case of venesection being practised in the arm or neck, how scanty is the stream of blood which escapes from the opening in the vein compared with the torrents of blood rushing through the venæ cavæ into the right side of the heart; and yet, in a case of obstructed circulation through the heart or lungs, how promptly and decidedly does this small diverted current lessen the distention of the whole venous system. Hot fomentations or poultices on the loins act by relaxing the superficial arteries! The skin, therefore, receives a larger supply of blood, and thus a portion of blood is diverted from the renal arteries. Then, too, there is some degree of depletion from the full cutaneous capillaries by the free local sweating which the warmth occasions.

Dry cupping acts in a somewhat similar way to hot fomentations. It draws an abundance of blood through the arteries into the subcutaneous capillaries, which, when the cups are removed, returns through the veins to the heart. In order that dry cupping may be most effectual, each cup should be removed as soon as the vessels beneath are well filled, and then it should be reapplied. The object is first to draw the blood through the arteries into the capillaries; then to allow it quickly to return by the veins, and not to keep it stagnating in the capillaries, which will happen if the glass be retained long on one spot. Another point is not to draw the blood into the skin with sufficient force to cause extravasation, the effect of which will be to impede the circulation through the skin, and so to divert more blood into the inflamed tissues beneath. The sole object of dry cupping, be it remembered, is not to irritate the skin, but

to draw blood rapidly from the arteries, and as rapidly to transmit it through the capillaries to the veins, in its backward course to the heart.

As a rule, it is well to give no alcoholic stimulants; or, if need be, to give them very sparingly in cases of acute Bright's disease. The imbibition of alcohol imposes extra work upon the kidney, and so is opposed to the principle of lessening as much as possible the work of the inflamed gland. Excess of alcohol is not an infrequent cause of albuminuria; and a very moderate employment of alcohol may tend to perpetuate and aggravate disease.

Not long since, a man was admitted into King's College Hospital, completely narcotized by a surfeit of wine, which was pumped from his stomach in large quantities. The urine drawn off from the bladder contained a large amount of albumen. In a few hours the man recovered consciousness, and the urine became normal. The temporary albuminuria was a result of renal congestion while the excess of alcohol was being excreted by the kidneys.

When acute Bright's disease is making satisfactory progress toward recovery, the dropsy usually disappears for a variable time before the urine ceases to be albuminous. It is very important to impress upon the patient that, until the urine has regained its normal character, he must be extremely careful to avoid cold, fatigue, and errors of diet.

The duration of albuminuria in cases that ultimately recover is very variable. I have seen many cases of recovery after the disease had continued for from three to twelve months; and I have seen some recover after the urine had been albuminous for one, two, three, and in one case four years.

The more I have seen of the disease, the more hopeful I have become as to the ultimate result, when the history and the symptoms, and, above all, the chemical and microscopical characters of the urine, do not indicate extensive and irremediable degeneration of the kidney. In all the cases of recovery from long-continued albuminuria, the preparations of iron have entered largely into the medicinal treatment of the disease, and have apparently contributed much to the favorable result. There are two preparations which I believe to be especially useful: these are the tincture of the perchloride of iron and the syrup of the phosphate. I believe that they are best taken with the food. I have frequently combined with each dose of the perchloride of iron ten grains of hydrochlorate of ammonia; and I believe that this ammonio-chloride of iron is a useful combination.

Among other remedial agencies, when acute renal disease is prolonged, and threatens to become chronic, change of air and scene is often highly beneficial; and I have seen some most remarkable recoveries effected under the influence of a long sea-voyage.

There are few diseases which, during their progress, cause more varied and severe suffering than confirmed chronic Bright's disease in its various forms. As the symptoms vary in the different forms of chronic renal disease, so a varied treatment is required in the different classes of cases. Without entering into minute pathological distinctions, for which we have now no time, I purpose to say a few

words on the treatment of some of the more frequent and distressing symptoms.

In one class of cases—cases of large white kidney, with a scanty secretion of highly-albuminous urine—dropsy is usually a prominent symptom. The tendency to dropsy is without doubt increased by the dry and inactive state of the skin; and this condition of skin seems to be mainly due to the hypertrophy of the muscular walls of the minute subcutaneous arteries. This excessive muscularity of the small arteries enables them to resist the relaxing effect of external warmth, so that a hot-air bath often fails to excite diaphoresis. Patients who do not perspire under the influence of a hot-air bath, usually complain of painful throbbing in the head, difficulty of breathing and other distressing sensations. So frequently is this the case that, in cases of chronic renal disease, I am now in the habit of substituting for the hot-air bath a prolonged packing in a wet sheet, surrounded with blankets. Patients often remain packed for periods varying from one to three or four hours, not only without distress, but with comfort and decided relief.

Diuretics are notoriously uncertain in their action. I have often obtained good results from the imperial drink, in doses of from one to three pints in the twenty-four hours. A very efficient diuretic is a strong infusion of fresh broom-tops, taken in sufficient quantity to act as a purgative. The free action of a hydragogue purgative, elaterium, compound jalap-powder, or compound gamboge-pill, is very commonly followed by a copious flow of urine. The escape of water by the bowels lessens the distention of the systemic veins, the circulation becomes more free, and therefore the secretion of urine more copious.

When other means fail to remove anasarca, a cupuncture of the legs, or an incision with a lancet, often affords prompt and decided, and sometimes permanent relief. I have seen a considerable number of cases in which life has been prolonged, and some in which complete recovery resulted, from the operation, after other means had failed to afford relief. It is very interesting to note the phenomena which follow upon acupuncture or incision of the legs in cases of anasarca. There is, first, a copious drain of liquid through the skin; then there is a further exudation of liquid from the over-distended blood-vessels; this liquid also escapes through the punctures, and its escape is often associated with temporary symptoms of exhaustion, a rapid and feeble pulse and pallor of the face. Lastly, there often occurs a more copious secretion of urine, in consequence of the greater freedom of the circulation through the kidneys. Dropsical accumulation tends to cause a secondary impediment to the circulation, by the pressure of the effused liquid from without upon the blood-vessels, especially the veins. Again, the capillary circulation becomes more and more impeded in proportion to the increasing watery distention of the veins. The drain of liquid from the areolar tissue through the punctured skin, allowing a further exudation from the distended capillaries, thus removes or lessens the obstruction which results from over-fulness of the veins. The general circu-

lation, therefore, becomes more free, and the greater freedom of the circulation through the kidney is attained, as we have seen, by a more copious secretion of urine. But it may be objected that incisions and punctures in anasaruous legs are apt to excite destructive inflammation. It is true that inflammation and sloughing may follow the operation; but this may also occur from over-distention of the skin or the pressure of the heavy, dropsical legs upon the bed. The result of my experience is, that inflammation of anasaruous legs has been as often subdued as provoked by acupunctures or incision; that inflammation is less likely to follow punctures in cases of renal than cardiac dropsy; and that the risk of inflammation after an incision about a third of an inch long in each leg, or after several acupunctures, is so nearly equal that I would in any case give the patient or the surgeon the choice of the operation. If I were the patient, I should choose the incision, as being on the whole less painful, and more rapidly and surely efficacious.

Dyspnœa is one of the most frequent and distressing symptoms associated with Bright's disease. It has various causes, and requires various remedies. When it results from œdema of the lungs, or dropsical hydrothorax, it is best treated by the remedies for dropsy. In some cases, anæmia appears to be the chief cause of dyspnœa. The red blood-corpuscles are the oxygen-carriers. When the blood—whether in cases of chlorosis or of Bright's disease—contains an excess of water with a corresponding deficiency of red corpuscles, and defective oxidation of the tissues, the demand for air expresses itself in hurried and laborious breathing. The remedy for this form of dyspnœa is to be sought for in the elimination of water, a carefully-regulated nutritious diet, and iron as a restorative tonic.

Paroxysmal dyspnœa in some cases appears to be of cardiac origin. The heart's action is rapid and feeble, or slow and feeble, the breathing distressed and hurried, with loud puerile respiration over the lungs. The dyspnœa in these cases seems to be due to the influence of deteriorated blood upon the pulmonary and cardiac nerves. It is not improbable that the cardiac weakness in some cases results from excessive contraction of the minute branches of the coronary arteries, and consequent anæmia of the muscular walls of the heart.

These distressing symptoms are often relieved for a time by ether or by brandy; and lately I have found that an occasional small dose (ten grains) of hydrate of chloral has done good. The cardiac and pulmonary symptoms to which I have referred are almost certainly made worse by opium in any form. There seems good reason to believe that in the hydrate of chloral we have a remedy by the cautious use of which we may for a time mitigate some of the nervous symptoms which occur in the advanced stages of incurable Bright's disease. I refer particularly to the cramps and muscular twitchings, which are frequent precursors of convulsions, and the distressing restlessness which, associated as it is in a greater or less degree with uræmia, is generally aggravated by opiates.

The sufferers from Bright's disease are always dyspeptics, and the gastric symptoms are often very obstinate and distressing. When in consequence of renal degeneration the blood is contaminated by retained urinary excreta, there is often a vicarious excretion of these impurities by the mucous membrane of the stomach and bowels. The gastric secretions are mingled with the ammoniacal products of decomposing urea; digestion is consequently impaired; there is flatulent distention of the stomach and bowels, nausea, vomiting, and diarrhœa. Relief is to be sought by a carefully-regulated diet, and by giving with the food from ten to twenty drops of dilute hydrochloric acid with a vegetable bitter. A small dose of strychnia, or the tincture of *nux vomica*, with a mineral acid, is sometimes especially efficacious. Pepsine may sometimes be given with advantage.

In some cases of advanced renal degeneration, the vomiting is so incessant that the patient has to be sustained by nutritive enemata, while iced water only is taken by the stomach. In some instances that have come under my observation, the straining and exhausting efforts of vomiting have been checked only by frequent whiffs of chloroform-vapour.

In conclusion, I have only to add that I shall be happy, so far as I am able, to answer any questions upon the various points which I have passed in review. I shall also be glad to receive practical hints from those who by their experience are enabled to give them.

COLLES'S FRACTURE.

A Clinical Lecture, delivered at the Massachusetts General Hospital, by R. M. HODGES, M. D.

Fracture of the lower extremity of the radius, commonly known as "Colles's Fracture," is of frequent occurrence; were it not so, such a number of patients could hardly have been gathered to illustrate a single lecture. It is caused, almost invariably by a fall on the palm of the hand, the weight of the body being thrown upon the radius, which breaks at its weakest part, viz., where the compact shaft of the bone ends in the cancellated extremity, and at a point never more than an inch from its articulation with the carpus. The displacement of the portion broken follows the direction of the resistance, the lower fragment of the radius and the carpus which is carried with it causing a manifest deformity on the back of the wrist. As the lower fragment rarely, either wholly or in part, rides past the upper, but is rather bent or crushed backwards, the solid, tubular shaft is driven into the cancellated tissue, and an impacted fracture is produced. On the palmar aspect a prominence is developed just above the wrist by the angular flexion of the bone just alluded to. These changes of contour give to the hand and arm a shape, when viewed in profile, which, from a fancied similitude, is frequently spoken of as the "silver fork deformity."

In addition to this posterior displacement the carpal fragment is usually carried toward the radial border of the arm, the hand, of course, following it;

and this more readily happens if the line of fracture is oblique, instead of being transverse, as is usually the case. The styloid process of the ulna is thus made to project in a way which might, erroneously, suggest its dislocation. The styloid process of the radius is naturally longer than that of the ulna, but by this change of position they are brought nearly or quite on a line with each other, and the altered relation of these two processes becomes a point of diagnostic interest. The ulna is not often involved in the fracture, but the ligament which unites it to the radius is sometimes torn from its attachments, giving rise to pain at the radio-ulnar articulation, which is almost characteristic of the injury.

The position of the limb at the moment of the accident, the muscular contraction by which it is accompanied, and the individual peculiarities of the bone involved, modify the severity of the injury; but the cause, the locality, the direction of the fracture, the deformity, and the impaction, are in all cases wonderfully uniform, varying in degree only, and chiefly as regards impaction. The cases here present verify this statement.

The "silver fork deformity," and the change in the relative position of the styloid processes of the ulna and radius, which betray the existence of a fracture, can ordinarily be detected by the eye, without touching the injured limb, but are sometimes masked by swelling and œdema, which give the wrist a cylindrical shape; while the prominence on the palmar aspect is occasionally only recognizable by a deep crease between the palm of the hand and the forearm. It is an unusual thing for the signs of this fracture to be so obscured as to leave any uncertainty in the diagnosis. The subsidence of swelling is not to be looked to for dispelling obscurity. It is apt to be very persistent, and the mere fact of a general swelling in this region is in itself evidence of a fracture.

Patients are apt to think if the movements of the wrist-joint are retained and they can flex their fingers, which is often the case, that no bone is broken. Supination is, however, invariably impaired. The hand pronates perfectly, and it is the position of pronation which the injured limb instinctively assumes, but on supinating it, pain is provoked so soon as the thumb is uppermost. This is explained by the injury of the pronator quadratus muscle, always caused by the fracture, and which reveals itself when the fibres are extended in rotating the radius.

Dislocation of the wrist is of such rare occurrence that it does not complicate the question of diagnosis. It is easier to mistake the injury for a sprain. The fracture being impacted, the head of the radius still rotates at the elbow, and crepitus is not common. Ligaments, the tendons and tendinous sheaths with which the bone at this point of fracture is surrounded, also unite the interlocking fragments.

It occasionally happens that the impacted bones cannot be disengaged, or the amount of force requisite to accomplish it is such as to render persistence in the attempt unadvisable. Some say that in old women no effort should be made to effect this; and others assert that the fracture reduces itself if the arm is properly "put up." When there is a strong

lateral displacement towards the radial border of the arm, with a prominent styloid process of the ulna, the deformity is apt to be permanent, as these features imply deep impaction and a firm dove-tailing of the bones.

To obtain reduction, extension should be made from the hand, or from the thumb alone, if there is lateral displacement, while counter-extension is made from the elbow. The surgeon then presses and kneads the fragments into place. By forcibly flexing the hand, the extensor tendons may be made to aid in pressing the fracture into position.

A great many splints have been devised for the treatment of this injury; but at the present time there is a belief that it does not require elaborate apparatus. Among all that have been proposed, there is none of more general usefulness than what is called in this Hospital "a spoon splint"—a straight splint, carved to fit the dorsal aspect of the arm and hand. It extends from the elbow to the ends of the fingers, and is accompanied by an inside splint, shorter, but reaching from near the elbow to the middle of the palm. These should be as broad, or broader, than the arm, and are best padded with towels. Any provision, either in the splint or the padding, intended to wedge apart and maintain the interval between the radius and ulna is useless. There is no interval at the point where this fracture occurs. The splints should be adjusted without previous bandaging of the arm, and held in place by tapes or inch-wide strips of adhesive plaster. A roller bandage is then applied, and if the tapes or adhesive strips have been properly secured, this should not be put on too firmly. Tight bandaging is a cause of synovitis in the sheaths of the tendons.

A pistol-shaped splint is occasionally used when there is much lateral displacement of the hand, but its efficiency in correcting this deformity is not very great.

Four to six weeks, according to the age of the patient, should be allowed for the wearing of splints, and the bandages should be changed as seldom as possible. If swelling and pain persist, the splints should be continued even longer than the time first named. In this Hospital, most of us believe that passive motion, so long as pain and tenderness remain, only aggravates the condition it is designed to remedy.

The articular inflammation which is frequently set up by the proximity of the injury, or by actual implication of the joint, is a source of stiffness which is sometimes unjustly charged to mismanagement by the surgeon. *An adhesive inflammation of the sheaths

* Suits for malpractice are not so often brought for fractures in the vicinity of the wrist as for those in the neighborhood of the elbow-joint, mainly because errors of diagnosis and unsatisfactory results are not as common in the former.

The complainant, in a case of alleged maltreatment of the fracture under consideration, usually attempts to prove either that the injury was not diagnosed; that the proper splints, as regards material, length, width, and shape, were not used; that the arm was bandaged beneath the splints; that the bandages were too tight; that they were not changed often enough; that improper padding was used (e. g., cotton wool); that passive motion was not practised, or not practised early enough; that too long an interval

of the tendons is another and perhaps more frequent cause of stiffness. The rigid and deformed wrist and fingers which may follow skilful treatment must be anticipated by any one who takes upon himself the care of this fracture, and advanced age in the patient adds to this liability. Mere deformity, however, does not interfere with the ultimate usefulness of the limb. Pains should be taken at the outset to forewarn those interested of these possible and often wholly unavoidable contingencies.

Prolonged bathing of the hand and wrist in warm water, and gentle friction with an inelegant but very useful liniment, composed of equal parts of lime-water and linseed oil, will do more to limber and soften the fingers and wrist than any passive motion, however unrelenting. It should be remembered that the flexor tendons of the fingers, both superficial and deep, run in one synovial sheath, and that any attempt to remedy stiffness in their movements can be accomplished more readily by flexing each finger separately, than by bending them all together, as is frequently done. If there is persistent pain, which unfortunately often happens, even the motion produced by rubbing is best omitted until irritation has subsided. Any violence that excites inflammation is prejudicial.—*Boston Medical and Surgical Journal.*

CLINICAL LECTURE ON BED-SORES.

By Sir J. PAGET, F.R.S., Lecturer on Clinical Surgery at St Bartholomew's Hospital.

Bed-sores may be defined as the sloughing and mortification or death of a part produced by pressure. When we press on any part of our bodies for a moment, on the removal of the pressure the part is quite white, owing to the blood having been pressed out. The colour immediately returns, however. In bed-sores, the pressure is continual, the blood is driven away, nourishment ceases, and death of the part takes place. There are three different fore-runners of bed-sores, (1) inflammation, the prominent parts, *e.g.*, the sacrum, posterior superior spine of the ilium, the trochanters, and the ends of the spines of the vertebræ, are seen to be red. (2) They may be simply pale and white. (3) They may be purple or yellow from the extravasation of blood or bloody fluid. Sloughing follows these in the skin and subcutaneous tissue and fat. These latter die before the skin, sloughing proceeds faster in them, and so when the skin comes away, the place formerly occupied by these tissues is empty.

was allowed to elapse between the surgeon's visits; or that attendance ceased too soon. A claim is also sometimes made for loss of time, and unnecessary pain endured, which different treatment, or more attention, would have prevented.

Disagreement may exist among the best surgeons as to the details of proper treatment in each case; but responsibility ceases when the errors of the surgeon cannot be distinguished from the errors and doubts of an inexact science. No surgeon should be condemned for a doubtful, or even a probable, undemonstrable fault.

Inexperience is unquestionably a prolific source of inefficient, if not bad treatment. A diploma establishes a presumption in favor of the knowledge, experience and aptitude of a physician, without creating in his favor a privilege of irresponsibility from which the public might suffer.

Then the deeper parts die—muscles, bone, until sometimes the spinal cord itself is exposed. Now bed-sores occur in those who are absolutely at rest. If there is the slightest movement from one side to the other bed-sores may be averted. A man with simple fracture of the femur, previously healthy, can move himself slightly from side to side, and does so instinctively. No man with simple fracture of femur ought to rise from his bed with a bed-sore. It would be the consequence of gross neglect if he did. In the case of those whose lower limbs are paralyzed, there can be no motion whatever, and so they are liable to bed sores.

The time when bed-sores begin to make their appearance is about fourteen days—that is, in the case of a healthy man who is absolutely unmoved. They will, of course, be accelerated by dirt, if his urine and feces are not constantly removed. There are certain cases which are especially favourable for bed-sores: the old, especially those with fractured neck of femur and those that are the fattest and heaviest, and most likely to become oedematous. Among ordinary persons, those that are the thinnest. When, as is commonly said, their bones are ready to start through their skin; the amount of tissues between the skin and projecting point of bone is so small that it soon, as it were, wears away, and bed-sores ensue. Those again in a state of fever, such as the lowest kinds of typhus, can scarcely by any means be saved from them. Their whole system is so poor and degenerated that sloughing takes place without any pressure at all; and you may see the ends of the nose, ears, etc., sloughing from the bad supply of blood. Continuous hectic fever is a state in which they appear, being an exemption to the general class of consumptive patients, who, though they may lie in bed for months, rarely have bed sores. They manage to move slightly and thus avert them. Pyæmia is another source, and is illustrated by a case in the hospital: a man who was admitted with phlegmonous erysipelas of a limb and was treated for it. On account of some misconduct he was discharged; after a while he came back with pyæmia and an enormous bed sore. His skin is very pallid and soft and does not properly discharge its functions and there is every reason to believe that every other organ of his body is in a similar state. His lungs may be auscultated and his urine examined, and nothing at all found wrong with them, and yet I venture to state that neither the lungs nor kidneys are performing their functions as they ought. A pyæmic subject, being so ill-nourished, is especially liable to bed-sores. Intense fever is also a productive agent. The man, whose thigh was amputated a short time since, had a most acute and intense attack of fever, and large bed-sores appeared. Now the fever is gone, the local disease is removed, and the bed-sores are healing rapidly. The risk of bed sores in the old with fractured neck of femur is chiefly in the first week, therefore treatment with a view to preventing them should commence immediately the patient takes to bed. After the first week the risk is not nearly so great. There is one peculiar class in which bed-sores rapidly appear, and that is rapid destruc-

tion with inflammation of spinal marrow. If in a fracture of the spine, a portion of the spinal cord, below the seat of fracture, be irritated and inflamed sloughing will ensue in these parts to which the nerves given off below the irritated part proceed. And this will take place in two or three days. Sir B. Brodie mentions a case in which a large slough formed on the heel in twenty-four hours. No doubt there were other causes for this. Two or three days is the usual time. The same takes place in disease of the spinal cord, especially in acute pyelitis. There is not so much risk of sloughing in parts deprived of nerve force as in parts whose nerve force is irritated and disturbed.

Now let us look at the means of preventing bed-sores, for nine-tenths of your care must be devoted to this; for if once they appear it is very difficult to get rid of them.

First of all look to the bed. Good bed making is an indispensable thing in the prevention of bed-sores. Several beds have been made especially for this purpose, of which the best is Dr. Arnott's. It consists of a chest full of water; on the top of this is a waterproof sheet, and over this an ordinary sheet on which the patient is laid. Here the patient is absolutely floating on water. The waterproof sheet is not drawn tight but adapts itself to every part of the patient. A patient might lie on this for years and never have a bed-sore. Inferior to this, but very good, is Hooper's bed. Here the waterproof on the bed is tight. They will avert bed-sores for a long time, but I should not like to say that a patient would never get a bed-sore on them. But you cannot have these everywhere; you can't take them about to everyone who may need them, and there are many cases in which they cannot be used at all, as in cases of fractured neck of femur, acute inflammation of knee-joint, and many others.

In ordinary beds the best thing is an ordinary firm mattress of horse-hair; and it must rest on boards. Cords are the worst possible things, as after twenty-four hours or so they give under the weight of the patient, and the most prominent parts are pressed upon. Iron gives after two or three weeks. Not so boards. It must be quite level. Under the horse-hair it is better if possible to have a spring or straw mattress. Feather beds and the like are, of course, to be utterly condemned. If possible, have two beds, so that you may lift the patient into the other when it wants making. You thus avoid making beds under him.

The next thing is to harden the skin. The best application for this is a solution of one part of nitrous ether in three of water. If the back is frequently washed with this, bed-sores may be completely averted. There is in the hospital a man paralyzed in his lower limbs; he has been in this state for ten months. By the good nursing of the sister of his ward bed-sores have been kept away. This application of nitrous ether has been used: solution of one grain of perchloride of mercury, with two drachms of nitrous ether, and six ounces of water, is another good thing. Whiskey is used in Scotland, as is brandy sometimes in England, but

these are not so good. In Germany they use a solution of tannic acid. When the parts look as if they were going to slough, these spirit applications may be too strong, and then a solution of gutta percha in chloroform is very useful. Next we have to prevent pressure on those parts where bed-sores are likely to occur. These are the middle line of the sacrum, after that, in thin persons, the posterior superior spines of the ilium, and the sacro-iliac articulations, then the trochanters of the femur. The chief thing is a frequent change of posture. If a patient can lie in four different positions during the day bed-sores may be prevented. He may lie on his back, each side, and on his face. Of course you couldn't make a stout person lie on his face; he would simply suffocate. This change prevents the gravitation of the blood. This may easily be seen by looking at the back of a subject in the post-mortem room. The back is quite red from this cause.

When patients lie on their backs they may be saved for a time by dividing a mattress and leaving a space of six inches between the halves. You may thus save the sacrum, which will have no pressure on it. The case before referred to was treated so, but sores came on the ilium and trochanters.

Large cushions made of amadou in the shape of a horse-shoe are very good. Isinglass plaster or felt water-pillows. Pads of cotton-wool may also be used with advantage. In speaking of the mode of curing bed-sores, already formed, let me remind you to continue your preventive treatment just as if there were none, lest they come in other parts.

During the sloughing there is nothing better than a poultice of equal parts of linseed and bread and enough charcoal to have a deodorising effect. Carrot and turnip poultices are also deodorizing, but they are not so good as the first. The poultice is best spread on ordinary tow. When spread on linen, etc., folds are liable to form, and if the patient is on these they promote the bed-sore. When slough begins to separate the resin or other stimulating ointment should be spread on the surface of the poultice.

When the slough has separated the sore should be dressed with resin ointment or Peruvian balsam, or equal parts of these in the following manner: little bits of cotton wool should be slightly spread with the ointment, and put into the sore until it is quite full. They thus make an equally soft surface for the sore. These are the chief local means for curing bed-sores. As regards internal treatment, don't stimulate. Let the diet be gentle but good; plenty of milk and bread; little or no meat, and a small quantity of wine.—*The Students' Journal*, May 10, 1873.

UNIVERSITY OF PENNSYLVANIA.

Service of Prof. Agnew.

[REPORTED BY DE FOREST WILLARD, M.D.]

Phimosis.

GENTLEMEN:—The child, six years of age, now before you is suffering from a contracted condition of the orifice of the prepuce, which is known as phimo-

sis. Now, as you all know, the glands in a male child is normally covered by the foreskin, but can be easily exposed if desired: in phimosis the orifice is so narrowed that this can be done only with difficulty or not at all. In these cases the prepuce is also elongated, either from birth or by the manipulations of the child, due to the constant irritation. If the opening be of three-quarter size no serious inconvenience may arise for years, but in the majority of cases, and in all where the orifice is small, the obstruction to the exit of urine will, sooner or later, lead to irritation of the glands and finally to balanoposthitis, this result being also contributed to by the constant accumulation of caseous material about the corona from the glands of Tyson.

Other grave results of this mechanical obstruction are seen in the various forms of urethral and vesical irritation, frequent micturition, nocturnal incontinence, retention, and even epileptiform attacks, in fact, the existence of a stone in the bladder is often suspected. The diagnosis can be easily determined by a sound, and by the removal of the offending prepuce, after which all the unpleasant symptoms quickly subside, if not already of too long standing. The cases in which the most serious irritation arises are those in which the mucous covering of the glands is adherent to the under surface of the prepuce.

That a narrow foreskin is compatible with perfect health of the genital organs is instanced by numerous examples, but when any irritation of the urinary tract occurs it is always advisable to remove the preputial tissues, especially if they are hypertrophied or indurated.

If this condition continues to adult life, and the man indulges in promiscuous intercourse, he not only runs a much greater risk of contracting disease, but he is liable to have such disease in an aggravated form, while at the same time it becomes less amenable to treatment, owing to its concealed character.

The observance of the religious rite of circumcision among the Hebrews undoubtedly renders them more cleanly and less liable to venereal contagion (*vide Medical Times and Gazette*, Dec. 1st. 1865.)

In congenital phimosis the contraction of the mucous portion may be sufficient to even retard the proper growth of the glans.

When the orifice is extremely small it might also interfere with the exit of semen to such an extent as to prevent conception, the erection subsiding before escape could occur.

Acquired phimosis is the result of an enlargement of the glands or a contraction of the prepuce, usually dependent upon venereal inflammation of some form. Such a condition occurring in an already phimosed organ renders treatment exceedingly inconvenient and is often productive of extensive loss of tissue by sloughing. When a chancre exists beneath an inflammatively phimosed prepuce it is unadvisable to operate unless imperatively demanded, since inoculation of the cut edges is likely to occur; an accident however, which would only require a cauterization of the edges with nitric acid. In such cases every attempt should be made

to reduce the enduration and swelling by cold applications, stuffing the cavity with lint saturated with sol. arg. nitr. frequent washings, dilatation by sponge-tents, etc. When the inflammatory supersedes the congenital form, however an operation will usually be required.

The treatment for simple phimosis will depend upon its degree.

In the case before us we find that the mechanical obstruction has begun already to render the glands very irritable, and the boy is subject to nocturnal incontinence of urine. We will therefore perform the operation of circumcision, since his prepuce is not only narrowed, but is very redundant.

The operation is best done by drawing the skin well forward, grasping it just in front of the glans with an ordinary pair of long forceps, or with the fenestrated forceps of Ricord, and then removing all the structures in front by one stroke of a bistoury. The forceps should be applied diagonally from below upwards and backwards, in order that the frænum be left undivided. The mucous surface of the prepuce is next slit up along the dorsum, and the ensuing flaps trimmed away until only a rim of the structure remains encircling the sulcus behind the corona. The skin and mucous membrane are now to be united by four or five points of silk interrupted suture, and a simple cold-water dressing applied. If the glands and prepuce are adherent, they must be forcibly separated with the director. The artery of the frænum will usually require ligature; any others may be transfixed by the sutures.

The operation as performed by the Hebrew priests differs from this only in that the mucous membrane is torn up and no sutures are used, a roll of lint being simply wound around the penis behind the glans. I understand that it is seldom or never attended with serious or even troublesome results, union ordinarily taking place in a few days.

When the phimosis is acquired and the prepuce is thickened, it is better to slit it up along the dorsum and then trim off the resulting flaps or angles especially in the mucous membrane, so that the cut surfaces may be brought nicely in apposition. The practice of slitting up the foreskin without paring the corners should never be sanctioned, as healing takes place only to leave large pendulous flaps or "dog ears" which detract greatly from the appearance of the organ.

As the mucous surface is the one at fault, it has been proposed that it should be forcibly ruptured by withdrawing the widespread blades of a pair of inserted forceps.

I have found *gradual dilatation* of much service when a chancre is concealed beneath a moderately tight prepuce. This may be accomplished by forcep blades or sponge-tents.

Nocturnal Incontinence.

The next patient is a boy seven years of age, whose mother complains that she finds it impossible to break him of the habit of wetting the bed each night. This is an affection which is quite common among chil-

dren, and is an exceedingly unpleasant one. It is frequently the result of negligence of habit, but it may be a symptom resulting from piles, prolapse of the rectum, intestinal worms, phimosi, cystitis, calculus, etc. It is most common among scrofulous children, but is sometimes met with in the robust and hearty. When not the result of habit, it shows either an irritability or want of tonicity in the sphincter muscle at the neck of the bladder, or that it is sympathetic. Our first effort, then, should always be to search for the cause, and in this case I inquire closely in regard to all the above-mentioned causes, but am not able to discover from this hasty examination that any one of them is in operation. He has no phimosi, or hemorrhoids, or worms.

What is the treatment? First, removal of the cause and education. The child should be permitted to eat only a light supper, with but little liquid, and should be roused two or three times during the night and compelled to evacuate his bladder. When the habit seems to result from indifference to personal cleanliness a judiciously inspired fear of "birch" may be of service.

Medicinally our efforts should be directed at the cause, but if this cannot be obtained much benefit will be derived from belladonna, administered in conjunction with the bicarbonate of soda. Three drops of the tincture may be given with five grs soda, frequently during the afternoon and evening. Hydrate of chloral, in full doses, and various other remedies are of use.

If anæmic the patient should take during the day, iron, quinine, strychnia, cantharides, etc., cold bathing and hygienic remedies be superadded, and cleanliness enforced.

Belladonna, however, exercises the most prompt influence over the disease, and if the drug be good will almost always relieve. In extreme cases it is recommended to obtund the sensibility of the neck of the bladder by applying to it a strong sol. arg. nit., but I believe such a procedure unnecessary, those cases which are called "obstinate ones" being due to some special cause, which it is the duty of the physician to discover. In girls it is more common, and may continue even to adult life. In adult *incontinence* is really but indicative of *retention* and *overflow*, and I have seen many patients brought near to death's door, suffering intensely from a full bladder when physicians of eminence in attendance had believed the bladder entirely empty and had carelessly neglected to introduce a catheter. I recall one case also, in which an "abdominal tumor," which had been treated for months, and which was accompanied by this symptom, was relieved effectually by the introduction of a catheter into the bladder, no less than twenty-nine pints being drawn off within the next three days. *Always* then, in the adult, use a catheter whenever you find incontinence. *Never fail to do it.* There may be cases of paralysis, or of peculiar prostatic enlargement, but the catheter is always the best test.

In hysterical females incontinence is not uncommon but it is inadvisable to use the catheter with them.

The urine will flow before the bladder bursts, especially if a warm or cold douche be used.

THE INJECTION OF PERCHLORIDE OF IRON IN PUERPERAL HEMORRHAGE.

By A. B. STEELE, L.K.Q.C.P.

Physician to the Lying-in Hospital; Lecturer on Obstetric Medicine at the Royal Infirmary School of Medicine, Liverpool.

When the injection of a powerful styptic into the uterus as a means of controlling post-partum hemorrhage was first suggested in the pages of the *British Medical Journal* in 1869,* I ventured to express my fear that the somewhat unqualified advocacy of this novel treatment was calculated "to mislead the inexperienced practitioner, and to divert his attention from those measures which are founded upon physiological data, and upon the accumulated experience of obstetricians since the time of William Hunter;" and further "that the only efficient means of controlling uterine hemorrhage is to secure uterine contraction; and that local styptics, so useful in some forms of non-uterine hemorrhage, are as a general rule inapplicable to uterine hemorrhage."

Dr. Barnes at that time stated his belief that the intra-uterine injection of perchloride of iron to arrest post-partum hemorrhage was "one of the most valuable improvements ever introduced into the practice of midwifery." An expression of opinion so strong and from so high an authority impressed me strongly, in spite of my theoretical objections, and I finally resolved to put the plan to the test of practical experience on the first opportunity.

As I am now in a position to speak from bedside observation, and finding from recent discussions that the treatment in question is still *sub judice*, I feel bound to contribute my quota to the settlement of so important a question in obstetric practice.

A circumstance which more immediately determined my adoption of this mode of treatment was the accident of my listening to a graphic description of a case by Dr. Williams of Wrexham, given at a meeting of the North Wales Branch of the British Medical Association, held last summer at Bala, at which I had the good fortune to be present. A lady who had been attended by Dr. Williams in several labours invariably suffered from post-partum hemorrhage to a degree which caused much anxiety for her immediate safety, and rendered each approaching confinement a source of dread to herself and her friends. On the occasion of her last confinement, Dr. Williams determined to try the effect of the iron injection as recommended by Dr. Barnes, and accordingly this was done immediately after the expulsion of the placenta and before hemorrhage had commenced. No sooner was the operation completed than the patient, notwithstanding her usual dread of impending hemorrhage, at once exclaimed, "I am better now, and I know I shall have no bleeding this time;" and such proved to be the case, and her re-

* *Brit. Med. Journ.*, 1869, vol. i. pp. 327, 388, 504; vol. ii. p. 102.

covery was excellent. This case impressed me so strongly that I resolved to adopt the plan on the first suitable occasion, which shortly after presented itself in the following case:—

A patient of my own, nearly forty years of age, of tender, delicate frame, deficient muscular tone and energy, large dilated veins, and the subject of hemorrhoids, which in the latter months of pregnancy became so aggravated as to necessitate their removal by the clamp and cautery, was taken in labour for the second time. Her first confinement, a year previous, was protracted and difficult from uterine and general inertia, rendering forceps delivery necessary, extraction not being effected without long and forcible traction; hemorrhage ensued, which was controlled by the ordinary measures, but a subsequent draining of blood continued, which, although not excessive in quantity, was nevertheless a source of much anxiety in her already exhausted condition. She, however, ultimately recovered after a tedious and troublesome puerperal period. The child was born alive, but died in a few weeks from diarrhoea and atrophy consequent upon loss of breast milk and general debility.

The second labour was almost as difficult and protracted as the first; she was delivered after long traction with the forceps of a fine living female child. Hemorrhage again set in immediately after the completion of labour. I at once injected a solution of iron, one part of liq. ferri perchloridi fortior. to four of water, which in a few minutes completely controlled all bleeding, and caused firm general contraction of the uterus, contrasting favourably with the imperfect and unreliable contraction so common under these circumstances; and which on the former occasion rendered her condition critical for a considerable time. Her recovery, although complicated by constitutional delicacy and feebleness, was nevertheless much more favourable than in her first confinement, and the child lived and thrived well.

The following case, which occurred shortly after that just related, is even more specially illustrative of the value of the iron injection, not only in puerperal hemorrhage, but also in the hemorrhages of abortion.

A patient about twenty-five years of age, a fair, delicate-looking woman, the mother of one child, first consulted me for a constant, and at times profuse loss of blood, which had lasted for many weeks, after an abortion at the fourth month. I opened up the cervix with tents and swabbed the uterine cavity freely with the undiluted liq. ferri perch. fortior.; after two applications all bleeding ceased, and in a short time she was quite well. About a year later I was called to see her in consultation with her medical attendant, in consequence of post-partum hemorrhage of a formidable character, which had come on about an hour after the completion of labour, and had already caused great depression, approaching to collapse. The bleeding was promptly checked by compression, cold cloths, and the other ordinary means, but reaction was slow in taking place; the patient remained for some hours in a feeble, excited state, with delirium and other symptoms of constitutional disturbance, which required close watching for two or three days. She recovered slowly but completely.

In about twelve months after this she was again taken in labour, and I saw her as soon as the pains set in. Her labour was easy and somewhat rapid. Every precaution in anticipation of flooding was adopted: a full dose of ergot just before the expulsion of the head, careful compression of uterus with the hand throughout and subsequent to the expulsive stage, compress and binder, and so on. For a short time after delivery all went on well, and I left the room, but was soon recalled by the nurse, as the patient told her "there was a good deal coming away." I at once recognised the effects of hemorrhage in her pallid lips and faint condition, and found a large quantity of coagula in the bed and in the vagina, from whence fluid blood was still flowing. The uterus, although not entirely flaccid, was doughy, and did not readily respond to compression. I hastily prepared a strong solution of the solid perchloride (which fortunately I had brought with me), and having cleared the uterus and vagina from clots, during which process I could feel the warm stream still flowing, I threw up about a quart of the fluid which at once checked the bleeding, and in a few minutes the uterus, and especially the os, was firmly contracted. No further bleeding nor any untoward symptoms followed, and the patient made a better and quicker recovery than she had ever done on former occasions. In each of these cases the patients themselves appeared to appreciate the beneficial effects of the iron injection, and to acquire a feeling of confidence in its power to control the bleeding in a few minutes after its application; a sense of security which, while encouraging to the accoucheur, is not without its beneficial emotional effect upon the patient. I have used the iron in a few other instances, not so typical nor so interesting as to deserve record here; but in all the result has been satisfactory, and unattended by any appreciable after consequences of a disagreeable nature.

I therefore assume from my own experience as well as from that of others that this mode of treating puerperal hemorrhage is both safe and reliable, and under certain circumstances not only justifiable but strongly indicated as one of the most effectual means of rescuing a patient from imminent death.

I am disposed to believe that the action of the iron injection depends not so much upon its direct styptic or hemostatic effect, as upon its influence as a reflex excitator of the incident nerves of the walls of the uterus, and also by directly arousing the peristaltic action of that organ upon which the more powerful muscular actions are as it were based.

One class of cases to which the use of this powerful astringent appears specially adapted are those not uncommon and most troublesome forms of flooding which might be called recurring hemorrhage, where the uterus alternately contracts and relaxes, and where it is difficult to determine when the patient can be pronounced free from risk of further bleeding. Instead of being obliged to grasp the uterus for an hour or two, and feeling afraid to leave the patient perhaps for many hours, the use of the iron at once removes all doubt and difficulty, by inducing firm and permanent contraction.

With regard to the objections which have been raised to the use of the iron injection in flooding, I am not yet convinced that these are to be conceded as sufficiently established by observation to give them weight against the proved safety and efficacy of the treatment when judiciously applied. It has been said that the perchloride acts so powerfully on the walls of the uterus as to leave a layer of dead tissue of some thickness, which is liable to give rise to septicemia. I am not aware that this has been proved by actual observation; it appears to me improbable when the antiseptic property of the solution is considered.

The few reported fatal cases in which the injection had been employed, are not to my mind conclusive evidences of its supposed ill effects.

Deaths from septicemia and other puerperal complications following profuse flooding were sufficiently frequent before the treatment in question was adopted to render it at least doubtful whether the mortality has not been due to other causes than the use of the injection. Granting, however, that in this as in some other powerful remedies employed in circumstances of great and immediate danger to life, there may be a certain possible contingent risk of subsequent mischief, it then becomes a question whether we shall allow a patient to bleed to death before our eyes rather than employ means which we feel confident will rescue her from impending death, although they may subject her to possible future risk.

The mode of applying the remedy has been so fully and accurately described by Dr. Barnes as to render it unnecessary to add anything on that point. It may be well, however, to repeat one condition insisted upon by him, which if neglected will probably cause failure. Before injecting the fluid into the uterus, all coagula or remaining portions of placenta structure must be carefully removed.

A woman was brought into the hospital literally bleeding to death after an abortion at the fourth month. I opened up the cervix with tents and freely swabbed (I never inject the non-pregnant or immature parturient uterus) out the cavity with the undiluted liq. ferri perchloridi, but the bleeding, so far from ceasing, appeared to flow more freely than ever. As a last resource I introduced a finger up to the fundus and with infinite difficulty scraped off a minute particle of placenta structure, after which the hemorrhage ceased and the patient slowly but completely recovered.—*London Obstetrical Journal*.

THE EMPLOYMENT OF ERGOT IN CANCER.

In the *Obstetrical Journal*, for May, there is a report of D. Milne's exposition of the treatment of uterine cancer.

Dr. Milne referred to the caustic plan of treatment. He said that one of the foremost advantages of the method was the lesser tendency to a recurrence. Zandolphi and others had amply attested this. As regards the cause of this success, he thought it was owing to the caustic possessing, in addition to its corrosive property, an alterative and elective influence. Nitric acid and nitrate of silver are beneficial

in chancre; they destroy the morbid part, and induce a healing sore. In like manner it is reasonable to suppose that certain powerful caustics may operate similarly in the case of a cancerous ulcer, not only severing the morbid part, but promoting a healthy cicatrix behind. Then they may penetrate and search out and destroy those deeper morbid cells which are removed some way from the parent tumor and which insure its recurrence. It was far from contended, even if certain kinds of caustics possessed the eclectic power, that they would invariably succeed in affecting a cure; for just as there had been recurrence after the spontaneous sphacelus of a malignant tumor, so would there be after the destruction effected by escharotics; but it was maintained that recurrence was rarer than by the method of excision. The caustics recommended by Dr. Milne were the chloride of zinc, the dried sulphate of zinc, and the nitrate of copper; and the cases suitable were all those of encephaloid, carcinoma, and epithelioma, where the cervix only was involved. Although one would not perform excision unless there was only a small portion of the cervix attacked by the growth (and indeed many surgeons refuse to operate unless in cauliflower excrescence of limited extent), with benefit, when the disease was much more extensive, and for the following reasons:—First, the caustic does not excite peritonitis like the knife, while it corrodes its way upward beyond the remotest part practicable by excision. Secondly, there is no drawing down of the uterus required, with its risks of collapse, etc. As regards the mode of application of the caustics, the dried sulphate of zinc was to be first used, being applied to the cervix pretty freely through the speculum, the vagina being immediately thereafter plugged with cotton wool tipped at the uterine end with a little olive oil. This was to be applied until a slough came away, after which the cervix was to be injected with a saturated solution of nitrate of copper. This was done in order to attack any morbid cells lying beyond the sore from which the slough had separated. We might witness a healthy-looking sore after separation of the slough, but we were not to fold our arms and lapse into an easy contentment; for underneath the pretty-looking surface there might lurk the microscopic cells, sure guaranty of a fresh growth. No caustics seemed better adapted to elect, attack, and destroy these than nitrate of copper.

In reference to the function of ergot given internally in cancer, Dr. Milne observed that it had usually been administered, and with benefit, as a hemostatic; but he believed it had another effect, it led to the atrophy of the uterus. This was an original observation, which he claimed to have been the first to make. If it had the effect, and the author was convinced that it had, then its therapeutic power was greater than had been previously imagined, and could not but be viewed as of great value in uterine cancer. It was not only important to diminish the afflux of blood to the uterus, and thereby combat uterine congestion, a congestion present in malignant disease, but it was no less so to induce

uterine atrophy. This atrophy was natural after the change of life, at which period cancer advanced more slowly; and if he could antedate it, it would be reasonable to suppose that the progress of the dire disease would be retarded. In point of fact he had found such to be the case. The ergot, he said, should be given for a protracted period, intermitting it occasionally, if any of the bad results named in books appeared. He had never found such, however. Dr. Milne, in conclusion, related his experience of the ergot and escharotic form of treatment. He had cured two cases of cauliflower excrescence, and in three medullary ones he had retarded the disease at least. In one of these he thought a permanent cure would be effected, while as regards the others there had been a diminution of pain, of bleeding, and of offensive discharge. These latter, moreover, would fail to kill so soon as under the old plan of treatment. Even though this latter result, viz., a postponing of the period of dissolution, was all that could be achieved, it was yet worthy of our most devoted efforts. The great drawback in uterine cancer was the late period at which it came under professional notice. Usually the whole cervix and contiguous parts were involved, and every form of treatment was thus debarred. But let it be seen when limited to a part only of the cervix, and there was every hope that the ergot and caustic treatment would frequently cure, and often mitigate the more distressing symptoms while postponing death.

DIGITALIS IN ACUTE DISEASES.

At a meeting of the College of Physicians, of Ireland, Dr. James Little read a paper on the use of digitalis in the failing heart, and delirium of acute diseases. Having referred to the researches of Stokes and Corrigan as to the condition of the heart in fever, and to the use of stimulants in that disease, he spoke of the employment of digitalis in cases where stimulants were either not well borne or were actually contraindicated. They might disagree with the brain, and give rise to a train of cerebral symptoms; or from previous over-indulgences the patient might not be able to bear them; or in the presence of renal mischief their use would generally be altogether contraindicated. Under circumstances such as these the author had employed digitalis in more than twenty cases, including six of typhus, one of rheumatic fever, and the remainder of enteric fever. The preparation used was the tincture, given in half-drachm doses every three or four hours, and rarely every hour. The administration of the remedy was discontinued after the pulse had fallen to 80, and except in one case the action of the drug was supplemented by wine or brandy, given in cordial or stomachic doses. In one case of rheumatic fever, digitalis was used alone. The patient, a merchant, aged 32, had symptoms of a rheumatic attack towards the close of last October. Six months previously he had suffered from severe dyspepsia, with much cerebral disturbance. On October 26th, he remained in bed, the heart was very weak, and the temperature was 102°. Tincture of the perchloride of iron was given in twenty minim

doses every fourth hour. Four days later, signs of commencing cardiac complication appeared. The evening temperature on November 6th, was 103.6°, the highest during his illness. On November 11th, he was delirious at night, and on November 18th, he had been one hundred hours without sleep, his pulse was feeble (100 per minute), and the first sound of the heart was absent. As stimulants could not be borne, half-drachm doses of tincture of digitalis were given every hour. After eight doses, the patient fell asleep. Nausea having afterwards set in, the tincture was withheld, and one-eightieth of a grain of atropia, one-fourth of a grain of digitaline, and a fourth of a grain of morphia were injected hypodermically. The patient did well. The Chairman expressed his deep sense of the value of Dr. Little's communication, and alluded to the novelty of the application of digitalis in functional affections of the heart. Dr. Hayden could not but look upon digitalis as a cardiac tonic, the "opium of the heart," as it had been termed. He recalled the practice of Mr. Jones, of Jersey, who used the drug freely in delirium tremens. Dr. Hayden generally gave ten minims of the tincture, in combination with perchloride of iron and spirit of chloroform. He believed that digitalis was useful only when it acted on the kidneys. It was of great advantage in fatty heart with dilatation of the cardiac chambers. Dr. Grimshaw had used digitalis six years ago in a case of acute rheumatism with nervous symptoms, similar to the one described by Dr. Little. The patient was delirious except when under the influence of full doses of digitalis (given twice or thrice a day). The heart was very weak. In a subsequent attack digitalis failed, while brandy succeeded; the disease, however, assumed the character of pyæmic rheumatism, and the patient died. He believed the infusion to be the most reliable preparation of the drug. Large doses were especially dangerous in delirium tremens, and in all instances caution was necessary. He had used strychnia with much success as a cardiac tonic in fever. Dr. H. Kennedy relied most on powdered digitalis. The drug had long since been employed in maniacal cases. He considered that, in order to test its efficacy in a satisfactory way, the remedy should be given alone. Vomiting was a dangerous symptom. Dr. W. G. Smith dwelt on the importance of the class of cardiac remedies, and remarked on the inutility of experiments on the lower animals apart from clinical observation and experiments. Digitalis was proved to be a direct cardiac stimulant. The question of tolerance of the drug turned on the value of the preparation employed. The active principle, digitaline, had recently been isolated in France as a crystalline substance, very unlike the amorphous powder at present in use, and which was of most uncertain strength.—*The Medical and Surgical Reporter. Philadelphia.*

CITRATE OF IRON AND BISMUTH A NEW REMEDY FOR DYSPEPSIA.

Although I call this preparation new, it has been used for several years in the public hospitals and dispensaries of this city, and also in private practice,

and has acquired the reputation of being one of the most prompt and valuable remedies at present known for gastric disturbances, depending upon an abnormal or defective digestion generally, and particularly so for the gastric intolerance of consumptive patients. Its action is often so prompt that one full dose has in many instances afforded immediate relief.

Being requested some years ago to devise a liquid preparation containing Bismuth and Iron (at that time intended for use in some other complaints), I finally, after various trials, adopted the following formula, which I have followed ever since:

Take of Citrate of Bismuth, Ammonio-Citrate of Iron, each 320 grs.; Water of Ammonia, Water, each a sufficient quantity.

With four ounces of Water rub the Citrate of Bismuth into a smooth paste; gradually add Water of Ammonia until solution takes place, being very careful not to have an excess of Ammonia. Now add the Ammonio-Citrate of Iron and some more water; dissolve, filter, and wash the filter with enough water to make the solution measure one pint.

This solution, if intended to be long kept, may be partly made up with Glycerin, although I cannot speak from experience whether it is so well borne on the stomach. A more useful addition, however, is good sherry wine, of which there may be used ten fluid ounces, (or perhaps more), in place of so much water.

The above solution is prescribed under the name of *Liquor Ferri et Bismuthi Citratis*, and contains in one fluid-drachm two and a half grains each of Citrate of Bismuth and Ammonio-Citrate of Iron. The dose is from one to two fluid-drachms, half an hour before meals, or—when required, after meals.

It is, of course, no true double salt, chemically speaking, but only a mixture of Ammonio-Citrate of Bismuth and Ammonio-Citrate of Iron; and, although a true double salt containing those elements might perhaps be prepared, I doubt whether it could have any better effects.

The solution may also be prepared of a concentrated state, and spread upon plates of glass to dry, yielding exceedingly handsome scales of a golden-brown color, which must be protected from the light, and five grains of which are equal to one fluid-drachm of the Solution.—*American Journal of Pharmacy*.

TREATMENT OF DYSMENORRHŒA.

Chas. R. Drysdale, M.D., M.R.C.P., furnishes a paper on this subject to the *Medical Press and Circular*, from which we extract the following:

Painful menstruation is supposed to arise from three main causes—neuralgia, congestion, and mechanical stoppage to the outflow of the blood. In neuralgic dysmenorrhœa, hot baths of half an hour are very useful, conjoined with rest in a warm bed, or sofa; and ethereal draughts, (such as twenty drops of spiritus ætheris compositus, with twenty of spirits of chloroform in an ounce of camphor julep), or sal volatile may be used; or sunbul, in doses of three grains or hyoseyamus in doses of five grains of the extract. Indian hemp, or the inhalation of chloro-

form or ether, are rather heroic remedies. Morphia may be taken in half grain doses, either by the stomach, or better still, as a suppository. M. Bernutz, of Paris, praises the extract of hemlock in dysmenorrhœa. The root freshly powdered may be given in doses of four grains, or the succus conii may be used. Bromide of Potassium has been much praised by Raciborski, in doses of from five to ten grains. Lupulin is often used, in doses of four grains.

In cases of congestive dysmenorrhœa the application of leeches to the cervix uteri is often useful. Four or five leeches, put up to the cervix uteri by means of a glass speculum, are all that are requisite; or the uterus may be scarified by a long knife, just as is done in ophthalmia neonatorum. Hot-water bottles (those of galvanized India-rubber are the best) may be laid over the hypogastrium, and the bowels kept free by enemata, or doses of Epsom salts. As to the rare cases of extremely small os uteri, these are usually accompanied by an undeveloped condition of the uterus.

To assert, as Dr. Marion Sims does, that the treatment of the majority of the uterine diseases should be surgical, seems to the author to be absurd in the highest degree. According to that gentleman, who advises incision of the cervix more than even Dr. Simpson or Mr. Spencer Wells, this operation produces surprising and salutary effects in dysmenorrhœa, which, in his eye, is always mechanical. Incision may give rise to fatal hemorrhage, according to Dr. Kidd, in the Dublin Obstetrical Society, 1866. And Dr. Gream, of London, says that the division of the cervix sometimes brings on either a consecutive relaxation, which is prejudicial to gestation, or a scar. Dr. Barnes, in cases of conical cervix, divides the external os uteri, whereas Drs. Greenhalgh and Routh say that in the great majority of cases, the stricture is at the internal os uteri.

In France and in Germany there are but few who agree with the practice of Sims, Greenhalgh, and Routh, in this point. The uterus may suffer terribly from these heroic practices, and abscess, in the pelvic cavity may arise from them, according to West and others.

The introduction of the uterine sound, or of various sizes of sounds, may sometimes do much good in mechanical dysmenorrhœa, and the use of tents of laminaria digitata is often indicated, until the uterus is large enough to let enter a sound of the size of a No. 9 catheter.

The hysterotomes of Simpson, Greenhalgh, or Mathieu, are only required in cases of cicatrix after laborious confinements.—*Half-Yearly Abstract of the Medical Sciences*.

TREATMENT OF PNEUMONIA.

Notes by CHARLES R. DRYSDALE, M.D., M.R. C.P.

Senior Physician to the Metropolitan Free Hospital.

The treatment of pneumonia varies a great deal, each case must be considered carefully on its own merits. Age is the most important point to be con-

sidered. Children and old persons very frequently die, however treated; and hence, it is chiefly in young adults that any great latitude is permissible in trying experiments in treatment. Such patients are often treated by "expectation" by physicians of modern times, and allowed to go on with attention to the general rules of hygiene, such as simplicity in diet, plenty of fresh cool air, &c.

With regard to the use of bleeding in the pneumonia of young adults, it would seem that statistics are as favourable to this mode of treatment as to any other. But statistics group together all sorts of cases, and are, therefore, apt to lead in the end to complete scepticism and expectant practice. Physicians who formerly bled in cases of pneumonia, proposed, firstly to diminish the quantity of the blood for a time. Such bleedings sometimes seem to have done service in the first stage of pneumonia, whilst the crepitating râle is heard, and M. Bouillaud used to say, that we might thus "strangle the pneumonia at its birth." But in strangling the disease it was possible also to injure the patient, for the bleedings he practised often produced serious prostration, and favoured the onset of the stage of red hepatisation of the lung.

The more bleedings that are made the more does the fibrine in the blood increase, since the proportion of blood globules keeps always diminishing.

It was said that, by blood-letting, the temperature of the body was lowered, and the heart's action lessened. This is all true, but the good result does not last. The pulse, feeble at ten in the morning, after a bleeding, rises at noon. And to effect the end, we should require to draw blood every four hours. The inflammation of the lungs is a multiplication of cells and a proliferation of the tissue of the lungs, a process of new formation of cells. Bleeding can do nothing against this. Resorption cannot ensue until the exudation has become fatty and granular, that is, demi-liquid, which takes place only on the sixth or ninth day.

So that bleeding is useless, except in the first days of pneumonia, when the crepitating râle is present; after this time it produces only anæmia.

Slight blood-letting sometimes diminishes the dyspnoea in pneumonia, and sometimes softens the pulse in sthenic cases. It should not be used in the delirium of pneumatic patients; for, as Dr. Magnus Huss has shown, such cases of delirious pneumonia occur usually in drinkers, or in the aged. "Bleeding" (says Van Swieten) "kills drinkers". Children should not be bled, for expectant treatment does best in their case; and, if bled, children may be rendered anæmic for long. Old persons, again, should not be bled. The inhabitants of towns are rather paler than countrymen; but bleeding suits neither citizens nor country people. Country people are often reddened by the sun, and also by alcohol, and bleeding soon exhausts their strength as well as that of townsmen.

Perhaps, then, the true treatment of pneumonia, even of the most sthenic form, consists in low diet, cold fresh air, frequently renewed; and for drugs, the use of small doses of tartarised antimony in fit cases. Whether hot fomentations or cold applications (ice to the part affected) should be used is not,

perhaps, quite clear. The former are less formidable, and often do great good in relieving the dyspnoea. The wet sheet will reduce the temperature sometimes from 104° F. to 102°, and gives great relief in fit cases. Alcohol is of no service in pneumonia, or in fevers which, when treated carefully by attention to temperature food and plenty of cool air, do, usually, very well indeed; unless, indeed, in worn-out and aged persons, in whom pneumonia is often from the first clearly destined to end fatally, or in young children when the fever runs very high.—*Dublin Medical Press.*

IN-FLESHED TOE-NAIL.

In the *Boston Medical and Surgical Journal*, Dr. B. E. Cutting describes a new operation for the relief of this distressing condition. His operation certainly has the advantage of being less painful and cruel than those ordinarily employed, while it leaves an entire nail to perform its intended function.

It consists in removing, with the knife, by a single stroke, all the diseased parts, *together with quite a large piece of the sound flesh, skin deep, from the side of the toe*—sometimes making an open wound of, say, nearly an inch long by half or three-fourths of an inch wide. No portion of the nail need be removed; but if, in order to fully secure all the diseased flesh, overlapping or undergrowing, a segment of the nail is involved in the cut, no harm comes of it. The result is quite as good, perhaps better.

By this operation, in the first place, all the diseased parts are removed at once, and a clean, healthy wound substituted; to be treated as any other open freshly-cut wound, and to be allowed to heal as soon as possible by granulation. Generally the healing is rapid, and without interruption.

In the second place—and this is the principle on which success depends—as the comparatively large and superficial wound heals (a cicatrix being always much less in size than the original wound) there is a contraction of the parts, and a drawing-in of the skin towards the centre from all sides, including, of course, that near the nail; so that when the wound is healed there is nothing left in the way for the nail to impinge upon in its subsequent normal growth. The shape, also, of the toe itself is usually much improved by the operation.

Thus, as may be seen, the operation is a very simple one; but it differs from all others hitherto described, in itself, and in the principle on which it is founded—that of cicatricial contraction. That it is effective may be inferred from the fact that after many trials, during twenty or more years, no case of failure has yet occurred; at least no patient has yet returned to complain of its want of success. Recurrence after other procedures is common enough. This operation has been repeatedly and completely successful when the usual methods, scraping, paring, compressing, packing with lint, uplifting or separating the nail from the flesh by metallic or other substances, removal of "fungous," "callous," or other formations by caustic or the knife, evulsion of part of the nail at the side, or of the whole of it—the last,

"the only method really serviceable" (Erichsen), a "barbarous practice" (Gross)—and other measures of more or less "cruelty," had been tried in vain.

TREATMENT OF NERVOUS APHONIA AND CHRONIC PHARYNGITIS.

Dr. MANDL, in his "*Traité Pratique des Maladies du Larynx et du Pharynx*," quoted in the *Dublin Journal of Medical Science*, April, 1873, notes as an important clinical fact, that an essential nervous aphonia, viz., bilateral dynamic paralysis of the tensors of the vocal cords (crico-thyroides) may perhaps be in young girls the precursor of a tubercular inflammation which declares itself later. The return of the voice on the application of electricity is not an absolute security. It is in such cases especially that it is necessary to abstain, according to Trousseau, from the employment of ferruginous preparations, which determine a sanguineous plethora by no means devoid of serious inconveniences in individuals predisposed to hæmoptysis and to tubercularization.

For a long time Dr. Mandl also has prescribed the use of iron in chronic laryngitis and pharyngitis, as the plethora consecutive to its administrations into local hyperæmia; consequently, chronic phlegmasias are more often kept up by it than amended.

That particularly troublesome complaint known as granular (follicular) pharyngitis, or clergymen's sore-throat—generally chronic in its nature, and, though often temporarily relieved, apt to relapse—Dr. Mandl has succeeded in curing, by painting the granulation twice a day, with a solution composed of one part of metallic iodine and one of carbolic acid, dissolved, by means of iodide of potassium, in one hundred parts of glycerine. If irritation supervene, the application is less frequently applied or superseded for a time. The largest granulations are first scarified, and then touched with the glycerole, but in a more concentrated form, and in variable proportions, according to the degree of the affection. This local treatment alone is, he believes, sufficient to radically cure the disease independently of any supposed diathesis. Dr. Mandl may probably have been led to adopt this mode of treatment from Dr. Hastings, who recommended the application to the "mucous crypts which had previously resisted the remedial effects of nitrate of silver," of a "saturated solution of iodine in rectified spirit."

OXIDE OF ZINC IN THE DIARRHŒA OF INFANTS AND YOUNG CHILDREN.

Dr. Brakenridge, of Edinburgh, whose experience is very extensive, and who has employed all the remedies in use for infantile diarrhœa, gives the preference to the oxide of zinc. He says 1. Diarrhœa in these cases arises from a condition of debility and great susceptibility of the nervous centres, which prevent proper secretion from the alimentary tract. 2. It is intimately associated with convulsions and convulsive affections. 3. It is accompanied by congestion of the secreting surface of the digestive passages.

To meet these conditions requires a remedy which

is at once tonic, antispasmodic, and astringent. These properties he believes to be united in the oxide of zinc. It is a tonic for the nervous system, just as iron is for the blood. As an antispasmodic and astringent it has already gained a reputation founded on clinical experience. He has employed it in twelve cases, four of them girls and eight of them boys, and varying in age from four months to one and a half years. The form was usually that of the powder, but it was also given in a solution of gum-arabic, with a slight addition of glycerine. The general results observed were—1. That it moderated the diarrhœa quickly. 2. That vomiting stopped. 3. That digestion improved. 4. That intestinal hemorrhage was frequently arrested. 5. Teething was favored rather than otherwise. 6. That even where no change was made in diet, and the other conditions remained the same, the treatment progressed favorably. 7. When, however, diet and regimen were carefully regulated, success was more rapid and decided.—*Med. Times and Gazette*.

MORPHINE AND CIMICIFUGA RACEMOSA IN PUERPERAL CONVULSIONS.

Dr. C. R. Gilbert, Metamora, Fulton, Co., Ohio, communicates to us his experience with morphine and cimicifuga in puerperal convulsions, which experience is so gratifying as at once to commend itself to the profession.

He states that with these remedies he seldom, if ever, fails to control the convulsions whenever the system is placed under their influence, and expresses himself confident by reason of practical observations extended through several years, that ordinarily this course of treatment will prove efficient.

He gives the Morphine and Fluid Extract of Cimicifuga alternately, both in large quantities, and repeated *pro re nata* until the system be manifestly brought under their influence, and succeeds in arresting the convulsions in from one to two hours.—*Clinic*.

AN IMPROVED MEANS OF PLUGGING THE POSTERIOR NARES

Mr. A. GODRICH, M.R.C.S., writes to the *British Medical Journal*:—

I beg to submit to professional notice an instrument that I have had constructed for plugging the anterior and posterior nares in cases of epistaxis. I have long been struck by the unsatisfactory means at our disposal in dealing with such cases. There is, in the first place, owing to its large curve, no little difficulty in passing Bellocq's sound, the point of the instrument often hitching, on the posterior edge of the floor of the nasal fossa. In the next place the adjustment of the posterior plug, requiring, as it does, the passing of the surgeon's finger into the fauces, not only causes much distress to the patient, but often entails a more or less severe bite on the operator, as I have found to my cost; and lastly, when the plug is in position, the string passing from it through the mouth causes so much irritation of the soft palate and fauces, that but few patients have the courage to submit to it.

The instrument consists of a small elastic bag stretched on the end of a hollow style, by means of which it is pushed through the nasal fossa into the pharynx.

It is then dilated with ice-cold water by means of the ordinary ear-syringe, the nozzle of which is inserted into a piece of India-rubber tubing tied to the other end of the style. A small piece of thread or twine tied round this prevents the water from escaping. The bag, thus dilated, is now to be drawn well forward into the posterior nares, into which, by its elasticity, it will accurately fit. The anterior India-rubber plug is next to be slid along the style (this is more easily done if the style be previously wetted) into the anterior nares, which it fits like a cork. The cohesion between this plug and the style will, I think, be sufficient to hold both plugs in position; if not, a piece of string tied round the style in front of the anterior plug will insure perfect security.

When it is necessary to remove the plug, all that the surgeon has to do is to cut the string tied round the piece of India-rubber tubing, when the water will be expelled by the elasticity of the bag, and the instrument may be removed without difficulty.

The instrument, even at its thickest end, where the elastic bag is stretched over the style, is not larger than a No. 6 catheter, and it can consequently be passed through the nasal fossa without the least difficulty, and with very little discomfort to the patient, as I have proved by frequently passing it through my own nose. The style being made of elastic material—in fact, a gum elastic catheter, and therefore capable of being bent to any curve required—also facilitates the introduction of the instrument. When once the instrument is in position, and quiet, it is almost impossible to tell by the sensations alone that there is any foreign body in the nasal fossa at all; the dilatation of the bag causing but little discomfort being above the sensitive soft palate and fauces.

SUCCESSFUL TRANSPLANTATION OF A RABBIT'S CONJUNCTIVA, AND ITS ADAPTATION TO THE HUMAN EYE.

J. R. Wolfe of Glasgow, reports the case of a foundryman, thirty-one years of age, where in consequence of a severe burn from a mass of red-hot iron, there had resulted in an extensive symblepharon, glueing the lid firmly to the ball, in such a position that its ciliary border covered the upper edge of the pupil. Six weeks after the injury, when the inflammation had entirely subsided, Dr. W. dissected the lower lid from its attachments to the ball, and, to prevent its re-adhering, sutured it on the raw surface thus produced, the conjunctiva which he then dissected from the eye of a rabbit. The animal was under the influence of chloroform, and the part selected was that covering the nictitating membrane. The eye was dressed with dry charpie and a compressive bandage. On the day following, the transplanted conjunctiva had a grayish aspect, and warm fomentations were ordered. On the second day the eye was swollen and very painful, but the conjunctiva had lost its gray hue and become vascular. On the

eight day, he was discharged, cured: the eye-ball freely movable, and the transplanted conjunctiva healthy and adherent throughout. A few days subsequently, an iridectomy was successfully performed at the upper, inner quadrant of the cornea, with the result of restoring him to useful eyesight. The patient was seen two months subsequently, and the condition of the eye was still entirely satisfactory. The author then gives a second, somewhat similar case, with equally favorable result.—*Glasgow Med. Jour.*, 1873.

TREATMENT OF PSORIASIS.

We observe in a recent number of the *British Medical Journal* that that leading dermatologist, Dr. Tilbury Fox, thinks that the treatment of psoriasis by arsenic internally, and tarry preparations, externally, is erroneous, and much too generally employed. For his own part, he has almost entirely given up this plan of treatment, except in certain chronic cases, and where there is a syphilitic taint, when he found Donovan's solution of great value. In all other cases, he relies mainly upon soothing applications locally, viz.: wet packing, alkaline and sitz baths, and oily preparations; and internally, remedies in accordance with the constitutional diathesis. This plan of treatment is especially successful in acute cases occurring in young children. Dr. Fox lays great stress upon psoriasis being treated on the same principles as other cases, with due regard to constitutional and other causes likely to affect and modify it.—*Medical and Surgical Reporter*.

HOPS AS AN EXTERNAL ANODYNE.—Enclose the hops in a bag, and subject it to the steam of boiling water, and apply as warm as can be borne. Dampening the hops *slightly* with a strong vinegar before steaming increases their anodyne virtues.

PILL FOR GASTRALGIA.—R. Sub. nitrate of bismuth, ʒ ii.; ext. belladonna, gr. x. Make into forty pills; give one night and morning.

TREATMENT OF THE INFLAMED BREASTS OF NURSES.

The method here recommended is so simple that no one need hesitate to adopt it, provided he is called in before the mischief has reached a certain degree of development. It is well known that engorgements of the mammary glands are frequently caused by chapped nipple. The inflammation of the skin extends directly into the ducts, exudations take place by which some of the ducts are plugged up, the milk is pent in, and hence the engorgement. If now, in such a case the breast be surrounded with the hands, and pressure made in the direction of the nipple, a thin, transparent whitish vesicle is caused, by the milk accumulating behind the closed orifices of the ducts. It is necessary, then, to do this, and, having done it, the next thing is to prick the vesicle with a needle, to remove any epithelial scales which may be present, and to apply the infant. If time has not been lost unnecessarily, the relief is almost immediate, and pain and tumefaction disappear in a few minutes;

but even when it is otherwise, the relief is very marked, and by repeating the process a few times, the sufferer is relieved altogether.—*Southern Medical Record*.

THERAPEUTIC REVIEW.

The *Ravista Clinica de Bologna* gives occasionally an admirable summary of therapeutics, from which we borrow some paragraphs.

Carbolic Acid has been praised in prurigo and pruritus, subcutaneously injected in doses of about one centigramme of the acid mingled with water. It has been used externally in acute articular rheumatism as a liniment mingled with linseed oil.

Arsenic has been recently recommended in cases of strumous enlarged glands of the neck, and also in pellagra.

Bromine.—Inhalations of bromine have been used in croup and diphtheritis; 30 centigrammes of bromine, 30 of bromide of potassium, and 150 grammes of water are combined in a lotion; and a sponge imbibed with this fluid is placed before the patient's mouth for five or ten minutes every hour.

Bromide of Iron is employed by some in cases of spermatorrhœa and involuntary seminal emissions, in doses of fifteen to twenty-five centigrammes occasionally; and, before the patient goes to sleep, in a dose of fifty centigrammes.

Bromide of Potassium has recently been used in cases of the sickness of pregnancy, and in cases of leucorrhœa, effecting cure in less than two months in the latter case. It is useful in summer diarrhœa in infants, in doses of three centigrammes every two hours.

Bromide of Sodium has a similar efficacy to that of bromide of potassium in epilepsy, and proved a cure in one case of tetanus.

Coffee has been given in infusion in cases of infantile typhus fever.

Conium has been used successfully in cases of mania, accompanied by muscular agitation. It acts on the motor centre, sparing the sensory tracts. Of twenty-five patients treated by this substance, twenty-two times the muscular agitation subsided.

Hydrate of Chloral has been used in cases of nocturnal incontinence.

Chloride of Potassium has been used instead of bromide in epilepsy, and it is asserted to be more efficacious. Dose: 3.50 grammes to 5 grammes a day.

Copaiba has been recommended in certain cases of psoriasis.

Iodine has been commended in cases of nocturnal incontinence of the aged; one drop of the tincture every hour in water. The tincture has also been recommended in doses of ten drops in intermittent fever thrice daily.

Iodoform is used in chronic venereal ulcers, and much praised as an antiseptic.

Iodide of Silver is recommended in whooping-cough.

Koussine is an excellent vermifuge, and is given in the morning in doses of 1.25 grammes in a little syrup.

Phosphorus has been recommended in chronic skin diseases in oil; or gelatine capsules containing each from two to six milligrammes of phosphorus in oil. Acne indurata, lupus, psoriasis, and scrofulous skin diseases have been cured by such means.

CONVULSIONS TREATED BY CHLOROFORM.

In confirmation of the experience of Mr. Mowatt, recorded in the *Journal* of May 31st, I may mention that some years ago, in a severe case of convulsions in a child aged seven months, I tried the chloroform treatment, and finding it beneficial, have continued it to the present time, with the best and most successful results. I only use the warm bath, etc., where I dare not treat with chloroform. When I am called to a case of convulsions, the first thing I do is to administer chloroform, and keep the patient under its influence until the convulsions have passed away. When the child wakes, I give small doses of bromide of potassium, taking care that the bowels are freely opened. I fully agree with Mr. Mowatt as to the caution required in treating cases where disease of the brain is at work.—*Frazer*.—*British Med. Journal*, June 14th, 1873.

HOW TO COUGH.

In the last number of the *American Journal of Med. Science*, Dr. John Stockton Howe, of Philadelphia, has an article "On How to Prevent Paroxysmal Cough." He tells us that at the age of 20, while a Medical student, he took the whooping-cough, and the abdominal tenderness occasioned by the almost incessant coughing was so severely painful that it was necessary, in addition to the usual remedies, to resort to some method to lessen the effect of the diaphragmatic succussion, or prevent the paroxysm of cough. The former was in some degree alleviated by placing the arms across the abdomen and bending the body as far forward as possible, thus making considerable compression of the abdominal walls. But this last procedure did not afford sufficient relief; and at the time of a paroxysm the fortunate discovery was made that, *by coughing out with a strong expiration, and immediately following it by a long deep inspiration through the nostrils*, succeeded by slightly hurried breathing through the nostrils alone (keeping the mouth tightly closed from the time of the first cough), the paroxysm was generally prevented—rarely coughing more than once, instead of six to twelve times, as was the case when this precaution was neglected.

This fact seems to favour the theory of reflex irritation of the fauces, from sudden access of cold air at the gasping inspiration usually succeeding the first cough, as the cause of the paroxysm; while breathing through the nostrils allows of the air being warmed and moistened by contact with a mucous canal five or six inches in length.

It is unfortunate for the application of this remedy, that the majority of those suffering from paroxysmal

cough are too young to be taught *how to cough*; but I cannot think they suffer a tenth part as much from abdominal tenderness as those who are old enough to apply it, which latter—if the author's case were not above the average degree of severity—will gladly avail themselves of a remedy, unique in its effect, and so easily applied, to relieve them of their excruciating agony.

EXTERNAL APPLICATION OF CHLORATE OF POTASH IN ULCERATED CARCINOMA.

The external use of chlorate of potash has been praised by Prof. Neumann in cases of dental caries. This physician recommends to alleviate the pains produced by caries the placing of chlorate of potash in the dental cavity. Many patients of Königsberg have had the opportunity of experimenting on the anodyne properties of chlorate of potash. Dr. Burow (*Berlin K. Woch.*) writes that the local application of chlorate of potash is of great service in cancerous ulcers. It is applied either in powder or in the form of the small crystals seen in pharmacy. These crystals act more energetically, but are more painful, so that it is better to use the powder first of all.

PROGNOSIS OF DELIRIUM TREMENS.

Dr. Magnau (*Mouvement Médical*, May 30) remarks that it is important to diagnose what cases of delirium tremens are likely to prove fatal when the early appearance of the disease is so constantly similar. Delirium proves nothing, for it may be intense in a slight attack. What is most important is the temperature. The attack of delirium tremens may be febrile or apyretic. In feverish cases we see the temperature rise rapidly to 39°, 40°, 41°, 42°, and even, in some cases, to 43°. If the termination is to be favourable, we notice towards the fourth or fifth day a sinking of the temperature, which gradually becomes normal. If, on the contrary, the termination is to be fatal, the temperature remains stationary, or rises to the last. In non-febrile cases, the thermometer oscillates between 38° and 39°, and about the third day becomes normal.

A second prognostic sign consists in motility. The trembling of the whole body is not the most important symptom. There are undulations of the muscles which continue during sleep, and are constantly observed when the hand is applied to the muscular surface of the patient's body. In such cases we may affirm that the prognosis is grave, the spinal cord is attacked, greatly hyperæmiated, and destroyed even in certain points by hæmorrhage.

A third sign consists in the feebleness of the lower extremities; a kind of paraplegia.

RUPTURE OF THE AXILLARY ARTERY IN AN ATTEMPT TO REDUCE A DISLOCATION OF THE SHOULDER.

This unusual accident is reported by Prof. Joseph Lister, and happened in the case of a man 58 years of age, who, eight weeks previously, had met with a fall, producing an ordinary subcoracoid luxation of the humerus. In the course of a somewhat

prolonged attempt at reduction (under chloroform), the limb was raised forcibly upward, in order to obtain the leverage afforded by having the acromion as a fulcrum, at which juncture a snap was heard as if of something giving way. Shortly afterward, efforts at extension having in the meanwhile been kept up, an enormous swelling suddenly appeared below and behind the axilla, almost as large as an adult human head, evidently due to a sudden extravasation of blood. Prof. Lister now lost no time in having the patient placed upon the table, when he proceeded to cut down upon the injured artery, exposing the seat of the orifice. The artery was then tied, both above and below this orifice, and the head of the humerus removed so as to permit reduction into the glenoid cavity. Death ensued three hours after the conclusion of the operation.

The results of the *post-mortem* examination were sufficient to explain the accident. In the first place, the walls of the vessel had been weakened by atheromatous degeneration, which was present to a marked degree. Secondly, the head of the humerus was found to be partly surrounded by a mass of osteo-fibrous tissue, forming bands and spiculae, designed by nature to form a partial capsule for the new joint, but which had become intimately connected with the axillary artery, so as to firmly attach that vessel to the humerus and also the coracoid process. Violent traction having been applied to the artery between these two points, the weakened vessel naturally enough gave way.—*Edinburgh Medical Journal*, March, 1873.

VERSION, BY DR. B. HICK'S METHOD

The Doctor (April, 1873) gives a description of this method, as follows: One hand, by pressure on the abdomen, brings into the plane of the upper strait of the pelvis the part of the fœtus which we desire to engage. Two or more fingers introduced into the cervix uteri push up and to the other side of the pelvis the presenting part. Dr. Lanth reports four successful instances in which he employed this manœuvre.

ARSENIC IN MENORRHAGIA AND LEUCORRHEA.

Dr. J. H. Aveling, *British Medical Journal*, Jan. 6th, 1873, calls attention to the good value of arsenic in the treatment of menorrhagia and leucorrhœa. The class of cases most benefited by arsenic are those in which the menorrhagia is due to hyperæmia of the passive or atonic character. When in this condition, the uterus is larger and softer than in its normal state. It is usually tender to the touch, and is of a deeper red than natural. After death the capillaries are found dilated, and the tissues tinged with blood. He usually begins with two drops of liquor arsenicalis three times per day, increasing the dose to four. The improvement is slow, but in this class of cases, is certain. The catamenia become normal in time and degree, and the leucorrhœal discharge entirely disappears. Cases in which the leucorrhœa has supplanted the catamenia are more readily cured by arsenic than any other remedy.

CONVULSION IN AN INFANT PRODUCED BY DRINKING ON THE PART OF THE NURSE.

Convulsions in young children are known to be not unfrequently induced by the habit to which their nurses are addicted of indulging in alcoholic liquors, and that this fact may be kept before the minds of physicians, it is desirable that well attested cases of this should from time to time be put on record in the medical journals.

M. Vernay reports an interesting case in the *Lyon Médical*, to which these remarks will apply, in which an infant was seized with convulsions, which continued with unabated violence for five successive days, in spite of the administration of bromide of potassium, musk, belladonna and warm baths.

It finally transpired that the nurse was in the habit of drinking from six to eight glasses of wine in the course of the day, besides taking considerable during the night. M. Vernay, thinking that the malady of the infant might have its origin in this habit of the nurse, took care that no wine should in future be furnished her. The result was that no further trouble was experienced on the part of the child.

Prof. Leroy has called attention to the deleterious habit of certain nurses of drinking freely of brandy or wine, whenever it suits their convenience to have the children under their care sleep for a considerable length of time.—*Boston Medical Journal*.

TREATMENT OF FISSURES OF THE NIPPLE.

In a paper by Dr. Créquey, fissures of the nipple are described as being of two kinds. First, those produced by the violent suction on the part of the child; here the epidermis is raised and abraded, as if by a cupping-glass. In this condition of the nipple, the child should be allowed to suckle only when the breast is charged with milk. Second, at other times, a little of the milk lodges in the minute cracks at the base of the nipple, where it comes in contact with the secretions of the body and rapidly decomposes, thus acting as an active irritant of the skin, and in some instances inducing very extensive inflammation. As a preventive of cracked nipples, originating in this manner, the breast should be bathed with warm water, wiped dry, and then anointed with the following ointment:—

R. Tannin, 1 gramme;
Glycerine, 10 grammes.

This should be applied by means of a camel's hair brush, after which the nipple should be protected with charpie, or a soft linen cloth. In these cases, the nipple-shield may be employed to advantage.

If the breast be distended with milk, relief may be afforded by the application of a large, flax-seed poultice, taking the precaution to protect the nipple with a piece of soft leather.—*Gaz. des Hôp.*, 1873,

UTERO-PLACENTAL VACUUM.

Dr. H. G. Landis, in the *Medical Times* (April 12th, 1873), reports a case of retained placenta which he caused to be easily delivered by simply per-

forating it. He did this from the consideration that the placenta resembled in one respect the boy's leather "sucker." The perforation permitted air to enter the vacuum behind the placenta, and so facilitated its escape.

NÆVI CURED BY MONSEL'S SOLUTION APPLIED EXTERNALLY.

Dr. Geiger, in the *American Practitioner* (April, 1873), recommends the external application of equal parts of liq. ferri persulph. and glycerine to the surface of nævi and a little of the adjacent skin. In two cases in which the applications were made twice daily the nævi disappeared in less than a month.

SCIATICA.

Some cases of this disease which had resisted a variety of treatment, were cured at Bellevue Hospital, almost at once, by the hypodermic injection of morphia over the seat of pain, plunging the needle deep into the tissues, perhaps to the depth of one or one and a half inches.—*N. Y. Medical Record*.

SULPHO-VINATE OF SODIUM IN CONSTIPATION.

This drug is recommended by Dr. P. DeMarmon as a mild saline cathartic in cases of chronic constipation. It is found to be an excellent substitute for citrate of magnesia (which now comes so impure) or Seidlitz powders. The dose for an adult is three or four drachms. Mixed with Seltzer water, or in water to which syrup of lemon has been added, it makes a palatable drink.—*N. Y. Med. Record*.

ALMOST INSTANTANEOUS DEATH OF A PHYSICIAN FROM CARBOLIC ACID.

S. D. V. Hill, M.D., of Macon, Miss. (*Rich. and Louisville Med. Journ.*), writes that Dr. R. S. C. Foster, one of the oldest practitioners of his county, left town at nightfall with a friend, having a flask of whiskey in one pocket and a bottle of Calvert's liquid carbolic acid No. 5 in the other. After riding two miles, and being cold, he proposed to take a drink of the whiskey, and took out of his pocket the carbolic acid, withdrew the stopper with his knife, and after offering his friend some, who refused, took about half an ounce before discovering his mistake. He died in ten or fifteen minutes after entering the cabin of a negro. A quantity of mustard and lobelia were given him, but of course it produced no emesis. The poison seemed to produce sudden and fatal sedation of the nerve-centres; he states that he must have died without much suffering. Dr. Hill testifies that Dr. Foster was perfectly sober at the time, and was a man much above mediocrity in intellectual ability. The mistake was made by the two bottles being about the same size and shaped alike.

PERUVIAN SKULLS.

The Anthropological Institute of Great Britain has received a present of 150 specimens of Peruvian skulls from Consul Hutchinson, of Callao, which were dug out of the old aboriginal burying grounds of Pasamaye and of Ancon.

ENGLISH MIDWIVES.

The London correspondent of the *Philadelphia Medical Times*, in a recent issue, writes that it is calculated that there are ten thousand midwives practising in Great Britain, and that from 30 to 60 per cent. of the women in many rural places and manufacturing towns are delivered by midwives, many of whom are very ignorant. A great excess of mortality among lying-in women is the result. A deputation of the Parliamentary Committee of the British Medical Association has waited upon the President of the Local Government Board, on the subject of establishing an examining and public register of trained midwives.

A PHYSICIAN'S DIARY OF BUSINESS.

A pocket diary has been picked up in the street, and now is in the finder's possession, awaiting its owner. From the following extracts, it appears the loser was a Medical man:—

"Kase 230, Mary An Perkins. Bisnes, wash-woman. Sikness in her hed. Fisik sum blue pills a soaperifik; age 52. Ped me one dollar, 1 kwarter bogus. Mind get good kwarter and mak her tak mo fisik.

"Kase 231, Tummes Krinks, Bisines, Nirishman. Lives with Pady Molouny whot keeps a dray—Sikness, digg in ribs and tow blak eyes. Fisik to drink my mixer twiet a day of sasiperily bere and jellop, and fi-h ile, with asifidety to make it taste fisiky. Rubed his face with kart grese liniment, aged 39 years of age. Drinked the mixer and wuddnt pay me bekase it tasted nasty, but the mixer'll work his innards, I reckon.

"Kase 232, Old Misses Boggs. Aint got no bisnes, but plenty of money. Siknes awl a humbug. Gav her sum of my celebrated 'Dipseflorikon' which she sed drank like cold tee—wich it was too. Must p't sumthink in it to mak her feel sik and bad. The Old Wommen has got the roks."—*The Sanitarian*.

URETHRAL SUPPOSITORIES IN GONORRHEA AND STRICTURE.

Henry E. Woodbury, M.D., Washington, D.C. (*Phil. Med. Times*, May 3, 1873), uses successfully in the treatment of gonorrhœa and stricture the following remedial agents: Tannin, persulphate of iron, nitrate of silver, and morphia. He considers nitrate of silver and morphia the most efficient from his experience in about twenty cases. The grounds upon which he advocates the use of suppositories in these diseases are as follows: By their use in gonorrhœa the remedy is kept longer in contact with the unduly active mucous membrane than by any other method; while in stricture their lubricating qualities exercise a soothing effect upon the irritated surface, and prevent too rapid healing of the parts.

GORDENIO.

Wm. Gordenio was the first person upon whom the degree of Doctor of Medicine was bestowed. He received it from the college at Osti in 1320.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, AUGUST, 1873.

TO OUR READERS.

One year ago, the *Canada Medical Record* was ushered into existence. No prospectus heralded our birth, but we quietly took our place among the list of journals. We felt convinced that there was room for such a periodical as we proposed to issue, and the result has by far surpassed our most sanguine anticipations. From every quarter of our vast Dominion we have received the most substantial encouragement, and great satisfaction has been expressed at the really practical character of the information which has, from the very first filled our pages. A subscriber who during the past month remitted his subscription says "that almost every number I have received, has been worth to me ten times the price of a year's subscription." Many others have expressed the same sentiments. While we have devoted especial attention to making the *Record* practical, we have not omitted to endeavor to make it interesting in other respects. The local medical news and politics of the day have not been neglected, and we have been pleased to learn that our "personal" column has been found by a very large number exceedingly interesting. It is always a source of great satisfaction for us to know the location and the success which is attending those who were our fellow students at College, and believing that this feeling is shared in by all medical men, we propose in the future, with the assistance of our subscribers, to make this column more extensive. Any information, therefore, concerning the movements of Canadian medical men, will be received with pleasure, and we wish our friends to co-operate with us. We also solicit contributions of cases from the profession. There is a vast amount of really valuable information being annually lost, simply from a modest desire not to appear in print. This is wrong, for the profession has a right, in the interest of humanity, to whatever may tend to render more perfect the Science and Art of

Medicine. As regards the future we will not make any loud sounding promises, but simply say that we will endeavor to improve upon the past. In one thing we have improved already, and that is the quality of the paper on which the *Record* is printed. This increases our expenses, but we confidently look to our friends to aid us. If each subscriber would only get one friend to subscribe for the *Record*, we would very soon be in a position to make still further improvements. Will our friends take the hint.

TO DELINQUENT SUBSCRIBERS.

We are glad to say that there are very few names on our subscription list to whom the term which heads this paragraph can be applied. Still there are a few, between forty and fifty, and as we have just glanced over these names, we are convinced that it is simply a matter of neglect. Still the neglect is of a kind which does not agree with us, and which these very men don't find to agree with them when it is practised by their patients. The price at which the *Record* has been placed is so low that we cannot afford to supply it for two years upon credit. We therefore respectfully ask those who have not yet sent their subscription to do so at once. We enclosed in the last number bills to all who were indebted to us. Those who have remitted will find their receipts enclosed in this issue.

We again have to request those who have received accounts, and not remitted the small amount of their annual subscription, to do so at once. To each the amount is exceedingly small, but in the aggregate it is considerable. We also beg to state that we do *not* take greenbacks *at par*. We make this announcement because several of our subscribers residing over and near the lines have remitted either the whole or a portion of their subscriptions in American funds. Those who have remitted since our last issue will find their receipts enclosed in the present number.

THE CANADIAN MEDICAL ASSOCIATION.

The Canadian Medical Association met in St. John, New Brunswick, on the 6th August, and elected Dr. William Marsden, of Quebec, its President for the ensuing year. We will give a synopsis of its proceedings in our next issue. In the meantime we congratulate Dr. Marsden upon

the position to which he has been elected. As one of its early, if not earliest promoters, the honor was justly his due.

TO CORRESPONDENTS.

C. J. M., Amherst, Nova Scotia—Will write some time during August.

M. D., Harvard University—Under the degree you possess you are unable to obtain a license to practice in Canada. Attend one full course at a Canadian Medical School, graduate, and the degree you then obtain will entitle you to a license. All the Medical Schools in the Dominion open about the same time, viz., the 1st of October.

S. C. complains that he finds among his patients quite a number who don't pay him, and from whom he cannot collect anything. Recently he has learned from a medical friend that many of these people patronised him in a similar way in his earlier years. Our correspondent asks what he is to do. We reply that the evil he complains of is a gigantic one—and the only remedy that we can suggest is the preparation by medical Societies, wherever they exist, of a Black Book, into which any member can enter the names of his defaulting patients. We could add a couple of well filled pages. The evil is one that is growing, especially in places where medical men are numerous, and where as a rule patients are grabbed, and no questions asked. We ourselves know a prominent person in Montreal—who has a considerable family of children—all of whom have been brought into the world by various medical men of good position, not one of whom have received a single cent as an honorarium. This should not be—merchants protect themselves by Mercantile Agencies, and we confess we don't see why medical men should not protect themselves by means of a Black list. It has been adopted in several places in the Western States, and is said to work very satisfactorily.

We have received two other notes, making enquiries, but as they have reached us late and they require some consideration before replying, we defer them to our next number.

We have received several numbers of a new medical paper published in Kingston, Ont., by Dr. Neish, under the title of the *Medical Times*. It is issued weekly at \$2.00 a year, and consists of eight pages. We wish it every success.

We have also received the forty-first annual announcement of the Medical Faculty of McGill College. The session opens October the 2nd. The circular is superior in appearance to any hitherto issued by this Faculty, although we confess the engraver of the wood cut of the Faculty's new building, which adorns the cover, has hardly done himself justice, while he certainly has done gross injustice to what would have made a most beautiful back ground.

The Victoria College circular (Medical Faculty, Toronto,) has also reached us. It gives the usual information. Private news informs us that the prospects of Victoria having a good class this year are encouraging.

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WE have received the Report of the Medical Superintendent of Rockwood Lunatic Asylum, Kingston, and will notice it in our next number.

— —

We direct attention to the advertisement of the Medical Faculty of Bishop's College. The session will open on Oct. 1st with an introductory lecture by Professor Trenholme. The third annual circular of this Faculty has reached us, and is a very creditable production, superior, we believe, to any College announcement hitherto issued in Canada.

ELIXIR FERRI ET CALCIS PHOS. CO.

Dr. Wheeler, of Montreal, prepares a preparation under the name of Elixir Ferri et Calcis Phosph. Co. It combines a sound sherry wine, in the form of an agreeable cordial: 2 grs Lacto-Phosphate of Lime, 1 gr Lacto-Phosphate of Iron, 1 gr of the Alkaloids of Calisaya Bark, and 15 drops of Free Phosphoric Acid to each half fluid ounce. It is a really very elegant and beautiful preparation, and is taken with ease by the most fastidious palate. But what is more important is that it is a reliable medicine, and is useful in a large number of cases. We have employed it tolerably extensively during the past year, and have every reason to be satisfied with the results it produced; we therefore have no hesitation whatever in recommending it. In February last, according to the *Detroit Review of Medicine*, Dr. O'Connor, of that city, brought this preparation before the Academy of Medicine and spoke most favourably of it. The result has been that quite a demand has sprung up for it in Detroit. Its range of applicability

is great, and we think our Detroit friends have not done badly to get from Montreal so beautiful and agreeable a vehicle of administering such important drugs as the Phosphates of Iron and Lime.

— —

OPENINGS FOR MEDICAL MEN.

For the benefit of medical men who may be seeking for locations, we give the following information, which has reached us from thoroughly authentic sources.

Allanburg, a village of about 400 inhabitants, on the Welland Canal, has no medical man.

Atherly, a village on Lake Simcoe, population 500 and increasing; has no medical man.

Cataract, a village in the township of Caledon, population between 300 and 400, with fine surrounding country, is destitute of a doctor.

Spanish River, district of Algoma, distant from Collingwood, a station of the Northern Railroad, 150 miles, has not a doctor within fifty miles. Population about 200, and increasing.

Ronaldsay, county of Grey, the Post-Master writes, "there is a good opening for a doctor."

North Keppel, county of Grey, has no medical man near it.

Penville, 40 miles from Toronto, on the North Railway, has no doctor, and none for miles.

Port Carling, in the county of Victoria, with a rapidly increasing population, has no medical man; the nearest being 22 miles distant.

Rockingham, in the Ottawa district, Post Master writes, "good opening here for medical man, one badly needed."

PERSONAL.

Dr. Kenneth Reid, a native of Huntingdon, and a pupil of Dr. Hingston's of Montreal, and a graduate of McGill, 1864, has recently returned from a very extensive European trip, embracing in his travels the Holy Land. Dr. Reid, who was for several years attached to the Quarantine Establishment of the port of New York, has taken up his residence in that city, in the fashionable quarter, No. 38 West 26th Street, and is thus early reaping the advantages, which the hosts of friends he has made, are capable of putting in his way. Already we notice by papers, which we have received, he is at the head of a charitable institution just organised, for the treatment of diseases of the eye and throat, and which is situated

in the west end. Associated with him, we find the names of several leading New York men, so that there can be no doubt of the success of the enterprise. Dr. Reid has been named one of the surgeons to the institution, the other being Dr. DeWolf, also, we believe, a Canadian. Few young men have ever commenced professional life in the great American metropolis under circumstances of a more favorable character, and we will be much mistaken if his course is not rapidly onward and upward. His many friends in Canada will read of his success with much satisfaction.

Dr. Therien, graduate of McGill 1863, is practising in New York, at 109 Allen Street, between Delaney and Brown.

Drs. David and Hingston, of Montreal, and Dr. Grant, M.P., of Ottawa, sailed in the *Georgia* on the 1st of August, for St. John, N.B., to attend the meeting of the Canadian Medical Association, which opens there on the 7th August. Dr. Turgeon, of Montreal, left by rail for the same place.

Dr. Burland, formerly of Hatley, has removed to St. John's, Quebec. We wish our friend every success in his new field of labor.

Dr. Sangster, of Toronto, was in Montreal the end of July, for a few days, *en route* for the sea side. His health is far from being robust, and he has resigned all his teaching appointments. He gave us an interesting and vivid description of the closing scene of the last meeting of the College of Physicians and Surgeons of Ontario.

We had the pleasure of a visit from Dr. Fraser, of New Glasgow, N.S., a few days ago. Dr. Fraser is a graduate of the University of Glasgow, Scotland, and was one of our intimate College friends, when we were in attendance upon the lectures of that University during the season 1860-61. We had a pleasant chat of an hour over College days and chums, some of whom have gone to their long home. Dr. Fraser is, we are glad to know, engaged in a large and lucrative practice. Several of his College associates, who take the *Record*, will be glad to hear of his success.

Dr. Agnew has been appointed professor of Sanitary science in Victoria College, Toronto.

Dr. Aikins of Toronto, accompanied by his wife sailed in the *Polynesian*, from Quebec, on the 19th July. He will be absent about three months.

Dr. Portier of Quebec, sailed in the *Polynesian*, on the 19th July. He intends spending a consider-

able time among the Hospitals of London and Paris.

Dr. A. A. Browne, (M.D., McGill 1872,) has located himself in Montreal. He has associated himself with Dr. Fenwick.

Dr. George Wood, M.D., McGill College, 1854, of Coaticooke, has removed to the Western States. Previous to his departure he was the recipient of a flattering address, and a testimonial.

Dr. E. G. Edwards, M.D., McGill College, 1854, of Strathroy, Ont., has been named examiner on Physiology in the College of Physicians and Surgeons, of Ontario.

Dr. Frederick Lawrence, M.D., Bishops College, 1873, has located in Marbleton, Que., and is already engaged in an extensive practice.

Dr. Maurice R. Bucke, M.D., McGill College, 1862, of Sarnia, has retired from practice, having secured a competency. His health is not the best, and being able, he has very wisely decided to take every possible care of it.

Dr. Hamilton of Dundas, Ontario, returned on the 19th July, from a very successful salmon fishing excursion on the Moisie River. He was accompanied by Mr. Turner of Hamilton, President of the Toronto and Bruce Railway. Dr. Hamilton on his way home paid a brief visit to his son, Dr. A. W. Hamilton, of Melbourn, Que.

Dr. Patton of Montreal, has this season again taken up his quarters at the fashionable Canadian watering place, Cacouna.

BIRTHS.

In Montreal, on the 20th July, the wife of Dr. J. Gagnon, of a son.

At Sorel, on the 7th July, the wife of Dr. J. H. Beliveau of a daughter.

MARRIED.

At St. Ours, on the 21st June, by the Rev. Mr. Larue, Dr. Omer Larue, of Putnam, Connecticut, to Marie Hermine David, daughter of Dr. David, of St. Ours, Q.

DIED.

In Montreal, on the 1st July, Marie Amanda, aged 4 months, daughter of Dr. A. Dagenais.

In Montreal, on the 5th August, Albert Horatio, infant son of Dr. L. O. Thayer, and Alice L. Ross.

In Montreal, on the 2nd July, Basile Hyacinthe Charlebois, M.D., aged 82 years.

In St. Cuthbert, on the 21st June, Marie Eugene Anna, aged 1 month, daughter of Dr. A. H. Paquet, M.P.

MONTREAL:

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Original Communications.

Address delivered before the Canada Medical Association, at St. John, New Brunswick, August 6th, 1873, By J. A. GRANT, M.D., M.P., president.

GENTLEMEN OF THE CANADA MEDICAL ASSOCIATION.—Exactly eight years have elapsed since the first organization of this Association. Our meetings up to the present have been in the provinces of Quebec and Ontario, but on no previous occasion have we assembled under more auspicious circumstances, welcomed as we are to so favourable a position as the City of St. John, the chief commercial centre of the Province of New Brunswick. From the wide spread character of our New Dominion, we could not expect the presence of many from the distant parts at these meetings; still, on every occasion, this Province, as well as Nova Scotia, was ably represented, and it is a recognized fact, that to the activity, energy and ability of the gentlemen from the Maritime Provinces, who previously filled the Presidential chair, this Association owes in a great measure its present degree of usefulness. Thus we observe that in medical science as well as in diplomatic affairs, these Provinces have taken no small part in the prosperity of the whole Dominion.

It was with no assumed feelings of humility that I expressed at our previous meeting, at Montreal, my lively sense of the responsibility of the duties that devolved upon me, performed with such marked distinction by my worthy predecessors. I trust that my efforts, however inadequate, will not flag in the accomplishment of what is right and best for that noble profession in which we should be, in the strict sense in the inspired words, "members one of another." We have a common estate in the science of medicine. We have a good work before us, and we do well to acknowledge our unity, and activity, in promoting, by these annual meetings, a oneness of feeling in the profession of the Dominion, and the advocacy of medical science in its most progressive form; side by side with the high-toned and intellectual members of the American Medical Association, alike interested in the advancement of medical science on this continent. Relying on the spirit which prompted you to confer on me the highest honour within the gift of the medical profession of this Dominion, I shall endeavour to discharge the duty as your presiding officer, in this position of trust and responsibility. Knowing, as I do, the great value of time in our short sessions, and how much work is expected to be accomplished, I shall confine

my remarks more especially to the appropriate subjects of the occasion. At our previous meetings much time was occupied in the discussion of a Dominion Medical Act, an able draft of which was presented by Dr. R. P. HOWARD of Montreal. After a lengthy debate, the conclusion arrived at was that this measure should rest *pro tem*. That the Medical Profession of the Dominion should be united by an Act in the Commons, is a point warmly and zealously advocated by many of the ablest members of our profession. By the Confederation Act, unfortunately all matters pertaining to education, as well as to public health, do not come within the jurisdiction of the Dominion Government, and consequently are strictly matters of local legislation. It is much to be regretted: still, by the consent of the Local Governments, much may yet be accomplished, towards bringing about those radical changes, so necessary in order to simplify, in the widest and most comprehensive sense, subjects both educational and sanitary.

In the Province of Ontario, for the first time in this country, the three bodies Allopathic, Eclectic and Homœopathic—sat in one council and deliberated upon medical affairs. This union was considered somewhat unique by many staunch old conservatives in the profession. However, when the fact became known that during those nine years, not a single homœopathist or eclectic passed as such in Ontario, the reason of the union can readily be comprehended. A uniform standard of medical education was established, written and oral examinations demanded from each student, and being compulsory, was the means of directing in the proper channel many who might otherwise have found an easier entrance into the medical profession. Recently the chief of the Homœopathic body has seen fit to withdraw from the Council of Ontario, and we anticipate that extra medical legislation may arise, in order to gratify those who considered their professional claims somewhat ignored. I merely mention the facts, in order that the profession in these provinces may apprehend the nature of that union so heterogeneous and characteristic. The great aim and object of this Association is to cultivate and advance medical knowledge, to elevate the standard of medical education; to promote the best interests of the profession, and to direct public opinion, as to the duties and requirements of medical men; to encourage a fraternity of feeling in the profession in the most comprehensive sense. With these objects in view, on the present occasion our Addresses will be delivered; one on Surgery, by Dr. HINGSTON, of Montreal; one on Medicine, by

Professor HOWARD, of McGill University; and one on Obstetrics, by Dr. HOLDEN, of Toronto, and one on Hygiene by Dr. BOTSFORD, of St. John. In addition, a Gold Medal is offered for the best Essay on Zymotic diseases. We anticipate a lively discussion on many points of interest, which will doubtless arise out of those papers. We look forward to a greater degree of activity in future in the Association, as general medical topics will occupy the deliberations of all interested in work, such as must tend to advance the best interests of our profession in this country.

The subject of medical education is a topic which at every meeting of this Association, has received well-merited consideration. Although somewhat worn, it is of such vital importance that it cannot be too frequently discussed, more especially when we observe the present manifest disposition of the rising generation to rush through a course of collegiate study, and enter into the practice of the medical profession, devoid of that literary training, so requisite in order to develop those powers of thought and observation so necessary, particularly when matters of life and death are concerned.

"A profession that does not equal the age of its educational machinery, that is unable or unwilling to represent its modes of thought and its forward tendencies in its demands from those who seek admission into its ranks, ceases to be a profession; because it loses its claims to a scientific character."

Great changes are yearly taking place in the progress of human thought and human industry, and in each department of science, only those methods are recognized, which rest on an educational basis. A defective preliminary education, is the first and undoubtedly the great error in the present system of medical education. There should be one standard of preliminary education exacted in all the Provinces from those who desire to enter the medical profession. A greater degree of uniformity now exists, than prior to our discussions on this subject. So long as there is a diversity of interest in matters educational, difficulty will attend the bringing about of that uniformity which would be arrived at by a Dominion Medical Act. Important changes are usually slow in their development, yet we look forward to the time when we shall have one chief educational centre, so guiding and directing the medical profession of this entire Dominion, as to build up an enlightened opinion, such as the members of this Association have at heart. While recognizing the progress of medical education in each Province, and the marked ability of those active in imparting a sound medical training, we

must await the spontaneous action of all, alike interested, to extend the principles of confederation we now enjoy, so as to unite us as a profession, strengthen our position as a body, and thus increase our sphere of usefulness.

There is a point to which I would now desire to call the attention of this Association, viz., the advisability of having thoroughly trained female nurses. In private as well as hospital practice we constantly experience a great want in this respect. In each of the large cities having extensive hospital accommodation, some system might be inaugurated by which those desirous of becoming skilled nurses might avail themselves of the facilities offered, and in course of time, supply a deficiency now generally felt in the practice of the profession. Such skilled nurses to obtain certificates of qualification and fitness for the position of honour and trust. Every town and city in the Dominion would gladly encourage the employment of such talent, and in that sphere woman would occupy her true position, as the administerer of the prescribed medicines, capable as she is of those soothing, delicate and kindly attentions so necessary at the sick bedside, and so cheering and gratifying to the patient. Miss NIGHTINGALE has thus fully expressed her ideas:

"I think the Anglo-Saxon would be very sorry to turn woman out of his own house, or out of civil hospitals, hotels, institutions of all kinds, and substitute men-housekeepers and men-matrons. The contrast between even naval hospitals, where there are female nurses, and military hospitals, where there are none, is most striking in point of order and cleanliness."

In points of sanitary domestic economy, woman carries off the palm, and, by her tidiness and cleanliness, establishes a degree of order seldom seen without her. The cheering look, the tender hand, the watchful eye, and the innate powers of observation, are such, that many little necessities for the sick patient are carefully thought of, that might escape the sterner powers of the skilled and educated physician.

The Sisters of Charity, who officiate as nurses in the Catholic hospitals of the Dominion, have, by their skill, dexterity and general neatness, earned a well-deserved reputation. Why should not the Protestant Institutions of Canada have a sisterhood alike charitable and philanthropic?

The subject of medical evidence in courts of law is one possessing no ordinary degree of interest. The value of such evidence in questions involving the causes of death, by unknown means has been long

recognized as having attained, with the various achievements of science, a remarkable degree of accuracy.

The position of the scientific expert is one of great importance. His deductions are based on a SOUND KNOWLEDGE of human structure; of the laws which regulate the organic functions; of the chemical laboratory in the system, possessing an action and reaction peculiarly its own; and of the disturbing forces, which induce death, under extraordinary circumstances. The courts of law at home and abroad consider such testimony of great value, and upon it frequently hinge matters of life or death. In carrying out such investigations both a thoroughly scientific knowledge and a perfectly disinterested mind are necessary. The great aim and object in view is to bring to the surface the principles of truth and honour, no matter how trying the attendant circumstances. Medical men should bear in remembrance the responsible and dignified position they are called upon to fill in medical enquiry. It is not upholding the status of our profession to find its members become partisans in courts of law. Cases of malpractice are not fortunately of frequent occurrence and when such do arise the professional man should never be found occupying an unenviable position, as the instigator of enquiry for purely selfish and personal motives. The whole profession suffers by disregard to ordinary professional courtesy. In courts of law our opinions wield a recognized power and influence, and it is gratifying to observe that in the various medical schools, the subject of medical jurisprudence is receiving well deserved consideration. Through the various medical Societies any professional irregularities in the law courts should be reported and, by this Association a power exercised, that would be productive of the most beneficial results. Regularities as well as irregularities should be noted by those interested in the welfare of the medical profession. In Canada we are yearly enlarging and increasing our medical periodicals, which give evidence of improvement by the abundance, variety and general excellence of the various contributions and selections. How is our Canadian Medical literature to be supported? This is a question which must strike forcibly the most ordinary observer. In the larger cities as well as the rural districts there are those who from their position, experience and knowledge of matters medical, could do much towards building up in this country such an expression of opinion as would tend materially to strengthen and consolidate the very best interests of our profession. It is generally acknowledged that there are more medical

journals than receive remunerative support, and that much labour, zeal and self-sacrifice are necessary on the part of both editors and publishers in order to promote the vitality of this form of medical literature. Such efforts are worthy of the highest commendation, for by means of local medical journals, many facts are brought to light, which otherwise might have passed, unrecorded. In Canada, as in Great Britain, hospital reports are yearly acquiring a greater degree of importance, and our medical students are being stimulated thus towards the cultivation of one of the most necessary branches of study, viz., to observe rightly and report intelligently. The country as well as the city practitioner should contribute regularly to our journals. The city with its extensive hospitals, large libraries, well-organized medical societies, has very great advantages; and yet it has been remarked by an able writer in favour of the country medical man, that "*original thought is usually best cultivated in comparative solitude.*" A high degree of excellence in medical journalism can scarcely be expected in so new a field of enquiry, and considering the efforts put forth to fan into vitality such able journals as the *London Lancet* and *London Medical Times and Gazette*, *Edinburgh Medical Journal*, and others of like celebrity, we should not be discouraged. In the recording of medical facts, it is prudent and right that such should be communicated plainly, avoiding, as far as possible, newly-coined words and abstruse phraseology, which in no way whatever will be acceptable to the plain, *common sense* practitioner. It is common sense which is most required at the sick bedside; it is this sense after all which achieves the greatest degree of success, educated, enlightened, and elaborated through the various scientific achievements and astounding discoveries, of this age of progress. Every physician in regular practice in city and country should not only take one or more medical Journals, but contribute as well. A large and lucrative practice, a high and influential position, are not alone sufficient to perpetuate a worthy name and reputation. These are perishable and will die out, when well-timed and well recorded facts, will last and establish true and genuine worth. ZIMMERMAN remarked "*that the greatest medical writers of any age were the best physicians.*" Those who communicate their views should rather be encouraged than decried. It is quite unnecessary to urge upon those who read the best medical journals, the importance of such publications. It is high time that those who fancy they can learn nothing from medical journals, should retire and leave the field to those more willing in every respect to

keep pace with the progress of medical science in its various departments. Let us then as an Association encourage and uphold our journals and contribute in every possible way towards building up and sustaining so worthy and so requisite a branch of literature.

In conclusion, I would merely advert briefly to the subject of Sanitary Science, identified as it is with national progress, and surrounded at present with more than an ordinary degree of interest. We are daily in possession of telegraphic news as to the prevalence in the Southern States of a much dreaded disease. Under such circumstances, I cannot permit this opportunity to pass without calling upon all interested to bring about, in every possible way, such sanitary measures as will tend to lessen the spread of cholera, should we be so unfortunate as to have a visitation of that disease. In the absence of danger, sanitary measures are frequently lost sight of, and even a moderate expenditure is a sufficient cause for the delay observed in carrying into operation the necessary precautions. While there is no occasion for alarm, there is a necessity for action on the part of health authorities. Mr. SIMON, the Medical Officer of the Privy Council of England, says:

"The dangers which particularly have to be guarded against, as favouring the spread of cholera contagion, are particularly two: first, and above all, there is danger of water supplies, which are in any degree tainted by house refuse or other like kinds of filth, as where there is overflow, leakage or filtration, from sewers, house drains, cesspools, foul ditches, or the like, into streams, springs, wells or reservoirs, from which the supply of water is drawn, or into the soil of which the wells are situate,—a danger which may exist on a small scale at the pump of a private house, or on a large scale, in the source of supply of public waterworks; and, secondly, there is the danger of breathing air which is foul with effluvia from the same sorts of impurity."

Filth percolating into well water is a very fertile source of disease. The report of Dr. BALLARD, of Islington, concerning the propagation of enteric fever, by milk polluted with enteric fever poison, through leakage into the well which supplied the cattle with water, is conclusive evidence as to the occasional origin of so trying a disease.

The subject of sanitary legislation is one of vast importance inasmuch as by preventable diseases, thousands of lives are lost which might be saved annually. We require fresh air, pure water and clean food; this brought about, even in a moderate degree, would confer an inestimable blessing on society at large. So strongly impressed are the members of

the American Medical Association, on this subject, that at their last meeting, at St. Louis, in June, a strong resolution was passed recommending the establishment of a "National Sanitary Bureau," with relation to the general Government at Washington, similar to the Bureau of Agriculture. It is quite evident, considerable new life must be thrown into this subject, and should sanitary regulations be thoroughly and systematically carried out, by skilled operatives, the advantage which would accrue to this Dominion would be beyond computation. An enlightened opinion would thus be built up, through the exercise of which, we might possibly effect such sanitary changes, as would be most conducive to the best interests of the general public.

Gentlemen of the Canada Medical Association,—We have assembled here for very important purposes, the eyes of the community at large are upon us; watching, cheering and guiding us along, in the performance of duty. At best we have only a few short years before us, and in the multiplicity and diversity of work, a single life can accomplish but little. Let that little be well done, keeping steadily before us the remarkable and striking aphorism of Hippocrates, which has been paraphrased by one of our greatest lyrics;—

"Art is long and time is fleeting;
And our hearts, thought stout and brave,
Still like muffled drums are beating
Funeral marches to the grave."

A CASE OF MYELOID TUMOR OF THE METATARSAL BONE OF GREAT TOE.

By EDWARD H. TRENHOLME, M.D., B.C., and Professor of Midwifery and Diseases of Women and Children, University of Bishop's College.

The patient in this case is of spare habits, and delicate state of health, about 45 years of age. Four years ago a horse stepped on the foot, bruising it in the vicinity of the metatarsal pharyngeal articulation. After the acute inflammatory symptoms had subsided, a chronic condition of irritability of the joint supervened, accompanied by a more or less persistent pain for two years, when I was consulted in May, 1871. At that time the trouble seemed to be limited to the joint alone. The cartilage of the metatarsal portion of the joint was gone, and the crepitation of the bony surface well marked. Believing the disease to be limited, as just stated, and being unable to work without intense suffering, I advised excision of the joint, which was objected to. The man returned to his farm near Ottawa, and I heard nothing more of the case till I was called to see him at the house of his brother in this city, on 15th June last. On examination the whole of the metatarsal bone of the great toe was found to be enlarged, thought to be about one and a half

inches in diameter. There was much pain on pressure, and distinct egg shell crackling, shewing that there was an osseous shell covering the tumor. Removal of the tumor was at once recommended, and to this the patient made no objection, as he was unable to work, and the pain was becoming more and more severe. Drs. Fenwick, Rogers and Kennedy saw the case with me, and kindly assisted by them, on 18th June, I removed the whole metatarsal bone of great toe, disarticulating it at the tarso-metatarsal articulation. The incision through the skin was made over the upper part of the growth between the great and second toes, around lower part of toe and thence along upper part of outer border of foot to the articulation. By this means the integument or tissues of the sole of the foot were preserved. The operation was performed without difficulty, two ligatures were applied to arrest hæmorrhage, and the parts closed by metallic sutures. The wound healed up by granulation, and the man returned to his home on 12th July.

On examining the growth after its removal, it was found to be limited to the metatarsal bone, the whole medullary portion of which was filled with that grayish shining substance with blotches of blood color; the granulations were soft and easily broken down; the whole osseous envelope was enlarged, as already described, and the bony structure not much thicker than an egg shell.

The tumor is to be seen among other preparations in the museum of Bishop's College.

Correspondence.

To the Editor of the Canada Medical Record.

Marbleton, Quebec,

August 27, 1873.

DEAR SIR,—In the July number of the *Record*, I saw an article recommending the use of sulphate of quinine in whooping cough. Soon after I had a case, and determined to test its efficiency. It has even exceeded my anticipations. I have had quite a number of cases since, and have used the quinine treatment alone, and in every case have found it to cut short the disease within a week. I therefore ask you to kindly insert in the *Record* my experience of the new method of treating a disease which has hitherto proved most intractable to the remedies usually employed. I use it in solution, from five grains to eight grains to an ounce of water, dissolved by means of a little dilute acid.

In conclusion I would say that the *Record* is

worth fully ten times its price to me in my practice. I could not do without it.

Yours, etc.,

F. CHARLES LAWRENCE, C.M., M.D.

To the Editor of the Canada Medical Record.

DEAR SIR,—We hear men talking every day of the dignity of the medical profession and of the importance of upholding it, of what should guide medical men in their conduct to one another, and of sundry other things about which they know very little and practice still less. Their rule is, don't do as I do, but do as I tell you. When the status of the profession on this continent is compared with that in Europe, we are forced to confess there is a wide difference, and all the advantage is on the other side of the Atlantic. There must be reasons for this, as the profession has the same liberties here as there. We are afraid we have not to go far for those causes, in fact, they are in the profession itself. The profession, and particularly that portion in the Dominion, may be likened to a large family and the public its dying parent, whose property will soon be divided. The members of this large family, with their respective desires and ambitions to be satisfied, are striving and straining every nerve to undermine and undervalue the pretensions of each other, so as to gain the ear of this rich parent. They hesitate at nothing; it does not matter whether truth is to be distorted and their own self-respect lost; the means are nothing, so long as their end is accomplished. They will meet in daily intercourse, present all the appearances of polished gentlemen as far as exterior goes, will even meet amicably together for the discussion of scientific subjects, but alas, when the common parent is interviewed, how different. If it should happen that one in this family, who by his honesty and abilities succeeds a little better than the others in propitiating the goodwill of this parent, what follows? The others still carry on the same intrigues against each other, but they combine as well against the fortunate brother, and perhaps are more successful if they can combine religious and national feeling. Occasionally we may hear one telling some of the younger brothers to be upright, to keep steadily before them the good of the parent and the dignity of the family, and to do unto others as they would be done by; but how soon forgotten, and too frequently even by the teacher. The profession has partly to thank itself if it does not take the same standing here as in Europe. There is too much undermining of each other, and it very rarely hap-

pens that the one who does so makes anything by it, except loss of respect in the one who listens to him. How is it, that it is only in the medical profession jealousies of each other's success exist, and the motto of live and let live is forgotten? Want of education may be one of the causes, but some of the most eminent men of Europe have had only slim educations. Then, again, we have a large class who do not advance in their studies, and who remain where graduating day placed them. These men fall behind, both in knowledge and practice, and, as a natural result, will not hesitate to charge less than the intrinsic value of their services so long as they cut out a confrere. We have known some medical men take \$2.50 for an accouchment, because another charged \$5.00. Practices such as these do not help the profession any. We have known a professor, a person that every one supposed was possessed of every quality of a gentleman, disparage a brother professor to the students, simply because their opinions did not agree as to the justifiability of performing an operation upon a patient in whom disease was far advanced. When this is done in public, can it aid in maintaining the dignity of the profession?

I am, etc.,

GRUMBLER.

Montreal, August, 1873.

TO THE EDITOR OF THE CANADA MEDICAL RECORD.

DEAR DOCTOR,—I have heard that *certain* individuals have questioned the accuracy of a statement that appeared in the columns of the *Medical Record*, in an obituary notice of my late uncle, Dr. Robert Nelson, of New York and Staten Island. The article stated that he had operated for stone *sixty-five* times during his residence in this country. The operations and their number were cited by Dr. Hingston, in an able paper on "Lithotomy and Lithotripsy," read before the Canadian Medical Association, and afterwards published in the *Record*.

Dr. Nelson operated during his long residence in Canada *sixty-nine* times, his last operation shortly before his death was his *eighty-first*, when three calculi were removed—two by the lateral operation: a foreign body still being felt, he introduced his finger into the rectum, and there felt the third stone, which had worked its way partly through the rectal parieties; a bistourie was introduced per rectum, the stone freed and removed. The patient recovered. The mortality attending his operations was exceedingly small.

Should any of the unbelieving "Thomasases" be about to visit New York, now or at any time, it will afford me pleasure to furnish them with a letter of introduction to my cousin, Dr. Eugene Nelson, of No. 257, Fourth Avenue, where they can see the cabinet, and examine the collection.

Trusting that you will pardon this long letter, believe me to remain,

Yours very sincerely,

WOLFRED NELSON, C.M., M.D.

1, St. James' Place,
199 Canning Street,
City.

Progress of Medical Science.

INFANTILE CONVULSIONS.

By H. CRIPPS LAWRENCE, L.R.C.P., Lond.

Surgeon to the Westbourne Dispensary; late Res. Med. Off. Queen Charlotte's Lying-in Hospital.

Convulsions in infancy occur very frequently, and the rate of mortality therefrom is very high (73.3 per cent),* in relation to death arising from diseases of the nervous system, during the first year of life. In the following communication it is proposed to treat of infantile convulsions and eclampsia infantum with reference to (a) clinical symptoms, (b) pathology, (c) treatment.

(a) Clinical Symptoms:—

All observers agree in referring to convulsions as symptoms of some disease or disorder arising elsewhere than where the convulsive effects are manifested, and all seek for a causation, centric or eccentric, to explain these phenomena as manifested through the nervous system.

An ordinary infantile convulsion consists of three stages; the first is, a *period of tonic*ity, evidenced by stiffness and hardness of the muscles, "without shock," as Trousseau puts it, "an index of the gradual, but yet rapid shortening of their muscular fibres."

Then ensues "a *clonic stage*, wherein occur alternate contractions and relaxations of the muscles, independent of the will, which can neither suspend, moderate or excite them."

Thirdly, as a sequence of the seizure, but intimately associated with it, is "a *period of collapse, stupor, or coma*."

Eclampsia is an expression for a more severe form of convulsions than such as attack infants of ordinary physique: similar to the eclamptic fit of the puerperal state, and attacking the more robust, as a consequence probably of the cerebral hyperemia of an active form.

Some regard the eclamptic fit as synonymous with the epileptic fit. Although, however, the same essential factors may occur in each, justifying the

* West, "Diseases of Infancy and Childhood." Fifth edition, pp. 33, 34.

adoption of Trousseau's statement, that if we look at the convulsive character alone of the two affections, "symptomatic or idiopathic epilepsy is only recurring eclampsia, and eclampsia is merely accidental or transitory epilepsy," yet if we look beyond this and study the matter with clinical care, we shall find the following symptoms of the eclamptic fit will aid the differential diagnosis between such an attack and epileptic seizure.

1. There is absence of foaming at the mouth.
2. The recurrence of the attack is irregular and frequent.
3. The eclamptic state rarely passes off so soon as an epileptic one, and never terminates by a critical sleep, as in epilepsy."
4. Some add its uniform connection with evident signs of fulness of blood, or acute disease in the brain.

The following differences in the symptoms of active and passive cerebral hyperemia and those of cerebral anemia will be best briefly contrasted if placed side by side:

Active Cerebral Hy.*	Passive Cerebral Hy.	Cerebral Anemia.
Fontanelle . . .	Tense . . .	Tense . . . Depressed.
Scalp and Face	Hot and flushed.	Tumid dark Pale, shrunken Livid.
Irides	Contracted . .	Dilated . . Dilated.
Pulse	Quick, full, hard.	Slow, irregu- Almost imper- lar, oppressed ceptible even in the carotids.
Bowels	Constipated .	Constipated Relaxed.

There is a clinical symptom which I have often observed, and which is, I believe, pathognomic of convulsions due to cerebral causes, viz:—either an irregularity between the pupils in size, one being dilated, the other contracted; or frequent oscillations of the iris, which are not influenced by alterations in the intensity of light.

In discussing now the predisposing and exciting causes of infantile convulsions it should be mentioned at the outset that the etiology is obscure, the mode of ingress and prognostic import of them are various, and the periodicity is uncertain.

Hereditary Disposition. Dr. Duclos of Tours has recorded a remarkable instance. A woman, aged thirty-four, was one of eleven children, six of whom died of convulsions, and she herself had eclamptic fits up to seven years of age. This woman had ten children; of these all had convulsions; six died, five in the first two years and one aged three years. The youngest of all was seen when six months old. At the age of three months she had her first fit, which lasted ten minutes: the mother believed the fit was caused by her suckling the infant when she herself was in a passion, as the convulsions ensued the next day. Death took place three months afterwards from cerebro-meningitis.

Among predisposing and exciting causes may be mentioned eclampsia in the mother during labor, insufficient feeding, large losses of blood, profuse diarrhoea, mental emotion, extremes of temperature.

Local Irritants as Exciting Causes.—From Trousseau I requote the following as most instructive and interesting cases:

Dr. Blache treated a case of recurring convulsions

* Hyperemia.

in an infant after all remedies, including a warm bath, had failed; but on removing the infant's cap a piece of thread was found attached to a needle, which latter had penetrated the brain. Upon withdrawal of the needle the convulsions ceased immediately, but hydrocephalus set in shortly afterwards and proved fatal. Professor Soubeiran's son died of convulsions, for which no cause could be ascertained during life, but at the post-mortem examination a needle was found transfixing the liver.

Underwood in his "Diseases of Children," records a case of convulsions in an infant which proved fatal, and after death a pin was found penetrating the anterior fontanelle.

Dr. Sayre, of Philadelphia, has written a pamphlet on the effects of congenital phimosis and adherent prepuce in producing partial paralysis and reflex irritation in children. I now look for this possible source of irritation in cases of infantile convulsion, and I have not unfrequently found it to co-exist.

Trousseau calls attention to the danger of severely sinapising and blistering infants, and thus practically impresses the caution: "How often have I seen medical men use fresh blisters against evils which they had themselves caused, forgetting the nervous symptoms which so frequently accompany burn of the first degree."

Symphathetic Forms of Infantile Convulsions may be induced by constitutional diseases, which, when latent, may act as predisposing cause of the convulsions, or if such diseases are in active progress they may prove an exciting cause of the same.

The rickety diathesis illustrates this form. Dr. S. Gee, in the third volume of St. Bartholomew's Hospital Reports, contributes a paper on "Convulsions in Children." Out of sixty-one eclamptic infants and children, fifty-six were found by him to be rickety. Though the convulsions and rickets may be but "secondary results of that state of general malnutrition of which the rickets is the most obvious and indisputable evidence," their concurrence and association together at the same time in the same infant is most significant and important.

There is a clinical observation closely connected with this subject of diathesis. Infants predisposed by diathesis, such as the rickety, may have convulsive attacks with distinct intermissions, and the return of the convulsions may be induced by the access of some acute or subacute inflammation, as bronchitis or pneumonia; nay more, the convulsions may be kept up by the inflammatory attack. In such a case attention has to be paid especially to the acute or subacute malady.

Andral has pointed out that there are peculiar idiosyncrasies which render the milk of a nurse well digested by some children, not by others. He relates that "a woman nursed her own child without any ill effect, but another child to whom she gave the breast was seized with convulsions, and a third likewise."

Sudden Ingress of infantile convulsions is regarded by Niemeyer as the only form of the disease which corresponds to "chill" in older persons as

premonitory of one of the exanthemata or of some inflammatory disorder. Recently I saw a female infant three months who was attacked a week after vaccination with severe convulsions, which ushered in an attack of congestion of the lungs. Curiously enough, the vesicles did not rise till the tenth day, but then very fully. As an illustration of the prognostic value of "sudden ingress" at an older age, in the autumn of 1870 I saw a little girl, aged three years, a patient of my friend Dr. George Dale, of Bayswater. The illness was ushered in by sudden convulsions of severe eclamptic form, sensorial disturbance, rapid pulse; these symptoms led us to prognosticate one of the exanthemata, probably scarlatina, which appeared the next day. The child recovered.

Single fatal convulsions have a forensic import and interest. When such a convulsion attacks an infant at the breast, death often ensues while the infant is in bed beside the mother, who, having perchance fed the babe a few hours previously, unexpectedly finds that it has died. Such infants are considered to have been overlaid. In the *British Medical Journal* of March 12th, 1870, I published two cases to prove that in neither case was the infant overlaid, but that organic disease caused death in them; and to advocate the necessity of necropsies in all cases of sudden death in infants.

A paroxysm consisting of a single fit is rare: recurrence is much more frequent, either in an intermittent or continuous form, or assuming a "partial" variety of convulsion.

A rare form of "*spastic or tonic contraction*" occasionally occurs, chiefly affecting the extremities, more nearly allied to spasm than convulsion, into which however it may merge. Dr. Copland associates this form with intestinal irritation, dentition, or worms, in young nervous or irritable children. The spastic muscular action continues for several hours or days, then ceases to return, or recurs at short intervals. The intellectual faculties, the general sensibility, and the muscles of the trunk are not affected, the pulse and the natural functions are not materially disturbed.

Dr. George Dale mentioned to me a case in which he found spastic action of the muscles of the arm and forearm during dentition. Moderate lancing of the gums gave no relief, but upon making a deeper incision, the "spastic" action ceased gradually, but permanently.

(b) Pathology:—

Hitherto pathology has not thrown much light upon the proximate causation of infantile convulsions and eclampsia infantum.

Morgagni wrote: "The cause of convulsions, which consist in an invisible change that has occurred in the brain and nerves, cannot be detected by our senses after death; its effects alone are seen, and these vary according to the violence and duration of the convulsions." Subsequently, the teachings of Trousseau confirm the insufficiency of our knowledge respecting the "organic pathological condition in consequence of which convulsions arise." The researches of Dr. Hughlings Jackson

and Dr. Ferrier are tending to elucidate the obscurity at present surrounding the subject.

In several necropsies made by myself on the bodies of infants who died of convulsions, frequent evidence of inflammation of the cerebral meninges, as well as of the brain substance, giving rise to diversity in its color and consistence have been noted. One portion of the intra-cranial contents was universally affected, which may throw some light upon the proximate causation of infantile convulsions—a pathological alteration in the condition of one or both plexus choroides. The alteration assume one of two forms—either a general hyperemia active or passive, or a localized congestion chiefly affecting the posterior end; and in some cases a general edematous infiltration of the greater part of the plexus. It would be too much in our present state of knowledge to apply to this occurrence the doctrine of "*post hoc ergo propter hoc*:" yet that a relation may be found between such conditions of the plexus choroides, and other alterations in the nerve centres, of which they are in the vicinity, and the convulsions which co-exist, is not unreasonable to suppose. In this communication I rather draw attention to the condition than seek to illustrate its associations.

(c) Treatment:

Active Cerebral Hyperemia inducing congestion of the brain, requires that during the fit all circular constrictions around the neck and chest must be removed. This applies equally to all forms of convulsion. The body may be immersed in a warm bath, to which some mustard, previously made into a paste with water, may be added, meanwhile a gentle douche of cold water should be poured over the head and face. When violent carpo-pedal contractions co-exist, a sinapism should be applied along the spine, and sinapisms to the soles of the feet, as rubefacients.

Ice-bags and bladders should never be ordered unless under medical supervision. Cathartics should be used freely. If the fits recur frequently, or laryngeal spasm supervenes, chloroform inhalation is indicated. Niemeyer advocates, in robust children, an enema of one part vinegar and three parts water, and if cold compresses applied to the head do not relieve, leeches should be applied behind the ears or to the temple. Dr. West recommends that the leeches be applied to the vertex in sufficient numbers to produce the effect of the loss of a certain amount of blood at once, and in any case upon removal of the leeches the bleeding must be immediately stanchied, and not left to continue *ad libitum* into cloths or poultices.

Passive Cerebral Hyperemia requires, if associated with marked lividity of the face and distension of the jugular veins, the abstraction of a moderate quantity of blood; carefully watched and guided by the effects produced. Cathartics are indispensable. Stimulant mustard baths should be used, and cold water sprinkled over the face and chest to excite respiratory action quietly. Slapping the nates would probably increase the screaming, and so do more harm than good. In extreme cases, insuf-

flation of ammonia and artificial respiration with the head raised are advisable, also the application of tepid, or for a time even warm clothes to the vertex. For the condition of asphyxia, Trousseau recommends chloroform inhalation.

Cerebral Anemia.—Regular suckling at the breast alone should be advocated, or if this be impracticable the infant should be fed with definite quantities of milk, frequently given by spoon or feather. Brandy, if required, should be given in quantities of five drops in a tablespoonful of milk every hour or two hours. It is in this form that suckling from a bottle is injudicious, as the fruitless attempts increase the exhaustion. Warm or tepid cloths must be applied to the vertex. Niemeyer recommends as a stimulant an enema of valerian or camomile tea; or an assafetida (10 or 20 grains to 4 ounces) clyster.

External Irritants must be sought for, and when found immediately removed.

Eccentric Internal Irritants, dependent upon some province of the nervous system, whence the morbid irritation which acts upon the medulla oblongata proceeds, will upon enquiry determine the administration of an emetic, a laxative, an anthelmintic, or an antacid. If the mother's milk disagrees it must be discontinued.

In cases of convulsion coinciding with the *rickety diathesis*, Dr. S. Gee recommends the bromide of potassium or ammonium (four grains to an infant aged one year, thrice daily) during the actual presence of the convulsions, and for about a week after; and when the fits have been absent for about a week or two, he advised cod liver oil and iron wine, continuing the sedative salt or not, according to circumstances.

Hydrate of Chloral.—There appears to be a special tolerance of this remedy. To infants under three months I generally give a grain with a grain of bromide of potassium, if rickets co-exist, every four or six hours. To older infants, between nine and eighteen months, much larger doses of the chloral have been given. A little boy, when eighteen months, had as much as fifteen grains within three hours, commencing with about six grains, and when twenty months old, a repetition of a like quantity with marked benefit to a like condition. He suffered from severe epileptiform convulsions resulting from acute cerebral hyperemia, coincident with the eruption of the molar teeth. Previous to the chloral he had had a mustard bath, sinapisms to the feet and ankles, calomel gr. j on the tongue, and two leeches to the temple. In the first attack the symptoms did not subside until after several doses of the chloral had been given, the effects being watched. A like continuance of the chloral alone sufficed to check the convulsions on the second occasion.

The question of prophylaxis and after-treatment in the intervals between the convulsions require attention to the ordinary rules of medical and surgical treatment, and are not noticed in this communication, which refers to the "essential" convulsions of infants.

OF THE THERAPEUTICAL USES OF GALVANISM.

By DR. SAMUEL WILKS, F.R.S., Physician to Guy's Hospital.

It must be generally admitted that the therapeutic uses of galvanism have received a fresh impulse since the introduction of the continuous current into practice. Until a few years ago the only method in use, except frictional electricity, was that of faradization. This was sometimes beneficial, but as often quite valueless, so that galvanism was either indiscriminately recommended in all forms of paralysis, or was systematically neglected. A very different feeling, however, prevails at the present time, for we are beginning to discern in what cases faradization is useful, and in what cases it fails; more particularly has it been noticed that it is in those very cases where faradization has been useless that the continuous battery current has been so fruitful of results. We some years ago introduced into our electrifying room a large battery in which any number of cells up to 100 could be combined, and with this instrument we have witnessed a success in many cases which scarcely could have been anticipated. We have a large number of patients daily being operated upon, and two or three attendants constantly employed either in the room or in the wards. It has not yet been satisfactorily determined why one form of galvanism should fail to stimulate a muscle and be useless as a remedy, whilst another form excites it to contraction and is curative. This may be dependent upon the condition of the muscle or of the nerve which supplies it, or the centre whence the nerve springs; at the present time the facts themselves are not sufficiently established, but when they are so we shall be able to use them as a means of diagnosis. All I shall attempt to do here will be to state some of the facts we have observed, and thus offer a small contribution towards the material out of which some more important conclusions may be eventually framed.

In the first place, we had no sooner possessed our battery than we discovered its marked value in cases of simple paralysis of the limb. In these cases faradization often fails to produce the slightest effect, whereas the application of the continuous current immediately excites the muscles to contraction, and eventually brings about a cure. A good case of the kind I give below. Then again, in various forms of paraplegia, its good effects have been most striking. As I have before said, it is most difficult to ascertain, in various forms of paralysis, whether an organic disease of the cord exists or not, seeing that all the symptoms which attend it may occur in the case which is functional and curable, and therefore it is true that galvanism has been used in many cases and failed; but, on the other hand, we have had a variety of cases which may be included under the term paraplegia, where a complete cure has been effected by applying the current to the back. In some cases of locomotor ataxy I have witnessed perfect recovery, both in hospital and private practice; also in cases of commencing progressive muscular atrophy. In paralysis agitans I never saw much good done by faradization or any other remedy, but in a

case I mention below it appeared as if much benefit might accrue from the use of a continuous galvanic current down the spine. In no case is the effect of the continuous current to the limb so remarkable as in the atrophic paralysis from lead, two examples of which I shall presently relate. The fact has now for some time been observed that the muscles in this affection are not susceptible to the interrupted current of faradization—that a painful amount of it may be used, and yet there shall be no response on the part of the muscle. I have had several cases in the hospital which completely establish the fact. On the other hand, if the continuous battery current is used, even in a mild degree, excitation immediately occurs; that is, when the current is completed and again broken.

In the very first case on which I experimented some years ago we found in the case of a young man suffering from lead paralysis, that whereas no irritation of muscle could be displayed by the magneto-electric machine, immediate contraction took place on the application of fifteen cells of the battery an amount which produced a scarcely perceptible effect on the arm of a healthy student.

It is observed that as the cure progresses so the susceptibility to the continuous current becomes less, and that a faradization greater, until as the healthy subject, both forms cause contraction of the muscles. The case of lead is very striking, because there are kinds of paralysis in which the two forms of galvanism act in the opposite manner; thus, lying in a bed near that of our patient, who was the victim of lead poisoning was a girl suffering from old-standing spinal paraplegia; in her case the continuous current produced not the slightest effect in stimulating the muscles of the leg, whilst faradization produced strong and painful contraction of the muscles. The same occurred in a man who had long been bedridden with an incurable paraplegia. It has been thought that faradization acts directly up on the muscles to stimulate it, whilst the continuous current acts through the nerve. This has by no means been proved, but it had if it might be used as an argument that in lead poisoning it is the muscular rather than the nervous system which is affected by the metal. Such an opinion, however, is not borne out by experience, seeing that the whole cerebro-spinal centres may become atrophied in plumbism, as evidenced by epilepsy, general paralysis or dementia. The atrophy resulting from lead differs from that which is called idiopathic in this respect, that although in the two cases no difference is observable in the form of wasting, yet in the latter there is very little susceptibility to either form of galvanism. It has been suggested by Dr. Russell Reynolds that there is no essential difference between the primary and the induced current, but that the simple interruption in the one case is sufficient to account for its peculiar effect—that muscles under abnormal conditions may not be able to take cognizance of a simple current passing through them, whereas they would if it were broken. If this were so, the primary battery current, if interrupted, should produce the same effect as the ordinary induced current or faradization.

In one or two cases where the experiment was tried, the result did not verify the suggestion. Where, for instance, one pole was placed just below the elbow, and the other pole stroked down the arm, a contraction took place when it was lifted from the limb or again replaced. The current was then interrupted by a wheel, but exactly the same phenomena occurred, contraction on making and breaking contact, but none whatever as the sponge was stroked down the arm. With faradization, on the contrary, violent contraction took place. In this case, therefore, the difference between the two forms, even when both were made to intermit, seemed well marked. Further observations, however, are required before I could give a decision on this matter, either for or against the suggestion of Dr. R. Reynolds.

I have already spoken of the intractability of cases of spasm and contraction of the muscles. In many cases organic disease of the spinal cord and nerves exists, and, therefore, no result could be expected; but even in others, as in wryneck, where an immediate effect of galvanism was witnessed, no permanent good resulted from its use. Even in cases of so-called hysterical contraction of the arm I have been much disappointed at the failure of galvanism.

The effects on the muscles in the cases of spasmodic contraction is seen in the reports, in which it appears that they are more susceptible to faradization than to the continuous current.

One must not forget to mention the soothing effect of galvanism. In cases where neuralgic pains have existed, patients have expressed themselves as much relieved by its application, and have often slept better afterwards.

The public is so much impressed with the value of electric baths that I proposed to try it in a case of lead poisoning. I am aware that others have pronounced it to be valueless, which, in all probability is the case, there being no proof that the galvanic current passes anywhere but over the surface of the body. In my case the speedy success was so remarkable as to throw strong suspicion on its having had any value at all.

I give the case below with the mode of use. Usually, I believe, the plan has been to place the patient on an isolated stool in the water, with one pole in his hand, the other being attached to the bath. In the present case Mr. Sandy used a different method.

Case 1.—Paralysis of Leg.—George W., æt. 36, admitted into Stephen Ward June 19th, for weakness of the left leg, and left July 23rd. This man was the subject of a remarkable enlargement of the veins on the surface of the abdomen, indicating some obstruction to the vena cava. He had observed this fourteen years, but it had given him no inconvenience nor interfered with his employment.

Patient stated that in March last he was seized with very acute pains through the left hip and groin, which gradually spread down the leg; and these pains were worse at night. Went to Swansea Hospital, where knee became contracted, and he took to crutches. He was then sent up to Guy's Hospital. He was put to bed, being quite unable to walk, on ec-

count of pains and weakness in the left leg. On examination, no local cause was discoverable for the symptoms; the leg was somewhat drawn up, it was perceptibly wasted, being smaller than the other, and sensation slightly impaired. On testing the limb the muscles were found to respond to both the faradic and galvanic currents. He was then ordered the continuous current to be applied daily to front and back of thigh. After the first application he expressed himself as having much relief from the pain, and in a few days it had altogether left him. At the same time the strength returned in the muscles, so that in a few days more he could walk. The current was still applied with a daily improvement in the strength of his leg, so that on July 10th he was walking about, and on the 21st he sufficiently recovered to be able to leave the hospital convalescent and nearly well. Patient took no medicine.

Case 2.—Paralysis agitans.—J. B., æt. 40, had been suffering for three years from the paralysis agitans. The complaint commenced in the right hand, afterwards proceeded to the left, and then to the legs, until a general tremor of the whole body took place, including the face, and affecting the speech. He had been under different kinds of treatment, but without any benefit. I wished to try the continuous galvanic current to the spine, and accordingly fifty cells (Cruikshank's) were used for ten days. After the second application the patient, who had previously had very restless nights, obtained refreshing sleep. After four or five applications he began to experience a decided benefit, saying he always felt lighter and steadier directly he had been operated upon. The duration of this improvement lengthened day by day. The patient then left for the country, and has not since been heard of.

Case 3.—Lead paralysis.—Mr. S., a gentleman of middle age, was brought to me, on March 11th, 1872, by Dr. Charlton of Fareham, suffering from a most severe form of lead paralysis. His whole frame was attenuated in consequence of the atrophy which his muscular system had undergone; his limbs were very much wasted, and he was proportionately enfeebled. He tottered when he walked, his hands shook, and were so weak that he with difficulty could raise them to his head or button his coat. He resembled, indeed, the condition of a man with progressive muscular atrophy, only in this case it was induced by lead and was not idiopathic.

The history which he gave of his case was as follows:—He lived in Surrey, about twenty miles from London, and had enjoyed good health until June, 1871, when his arms and hands became tremulous, so that very shortly he was obliged to use both hands to raise fluids to his mouth to prevent spilling. He was recommended a change of air and took a trip to Scotland; after being there a month he got considerably better and returned home. In a fortnight all the symptoms reappeared more severe than before. He went away again to Southsea, and there used salt-water baths, when he a second time rapidly improved, and at the end of a month returned home. Shortly afterwards, however, the old symptoms reappeared, when he was advised to consult a London physician.

He was ordered to use galvanism in the form (he stated) of magneto-electric shocks, which did not benefit him, when his doctor, suspecting lead, had his drinking water analysed and found it to be strongly impregnated by lead. He was then, of course, put on a proper course of medicine, desisted from the use of water, and he improved. He had continued the use of the galvanism. He subsequently left London and again went to Southsea.

When I saw him in March he had got into a stationary condition, and was in the state above described; his limbs wasted and with little power in them. I ordered him some small doses of iodide of potassium and quinine, and wished him to use a simple galvanic current rather than electro-magnetism. Finding there would be a difficulty in making use of this at his own house, I advised him to go to Guy's Hospital every morning, and to this he readily assented.

Mr. Sandy, the electrician, tried the effects of the continuous battery current upon him, and also the induced current, with the following results. In the right arm the extensor muscles contracted well by the application of twenty cells of the Daniell's battery. The induced current was applied, as strong as the patient could bear, with scarcely any contraction. In the left arm the muscles contracted well by fifteen cells, and with precisely the same results on the right arm, with the induced or interrupted current. In the legs twenty cells caused good contraction, but scarcely any result was obtained by the interrupted current.

He continued the use of the galvanism to the limbs daily and made visible progress.

On April 18th he had considerably more power of the limbs than he had a month previously, and, on the muscles being tested, it was found that the 'induced' current, which had been powerless before, now excited the extensor muscles of the right arm, so that the hand was raised on a level with the arm. On application of the same strength to the left arm it extended the fingers much more than the right, but the hand was not lifted to the same extent.

The patient persisted in the treatment up to July, during this period gradually improving, and in August he had quite recovered the use of his hands and was following his usual occupation.

Case 4.—Lead paralysis.—Margaret C., æt. 47, admitted February 29th, 1872. She has been married and has a large family. Two years ago her husband died, when she was obliged to work for her living. She gained employment in some lead mills, her business being to grind the white lead. For some months past she has been getting thin and feeble, her arms wasted, together with stiffness and pain in the shoulders. Has had slight colic.

On admission. She seems to be a small spare woman, anæmic and sallow, looking indeed extremely ill. She is thin, owing to a general wasting of the muscles of the whole body, more in the extremities and especially in the arms. She is too feeble to walk, and therefore obliged to keep her bed. She can scarcely raise her arms from her side, owing to the atrophy and weakness of the muscles; extensor muscles of forearm are extremely wasted, rendering the arm

quite flat, the wrists drop without there being the slightest power to raise them. Muscles of hand soft and flabby, the right arm and hand worse than the left, so that she cannot use them for feeling herself. The blue line on the gums well marked, and a distinct blue stain along the lower lip corresponding to the stained border of the gums. Slight oedema of eyelids. Ordered ten grains of iodide of potassium three times a day. Tested by galvanism. Faradization:—As much power as the patient can bear has a very slight effect upon the extensors of the thumb and not upon the other muscles. Continuous battery current:—Good and well-marked contraction of all the extensors by the twenty Daniell's cells. The continuous current ordered. Mr. Sandy finds the more efficient method to be by placing the fingers in water containing a little salt, the negative pole is placed in the water, and the positive pole gently stroked along the extensors. This causes contraction of the muscles and elevation of the wrist; when the poles are reversed the current and the effect are less.

April 17th. The continuous current has been used to the limb daily up to the present time, and the improvement has been marked though gradual. The blue line on the gums is much less. She is out of bed to-day for the first time. As the improvement has been going on, so the muscles have become susceptible to faradization, whereas they have required a larger amount of simple galvanism to affect them.

May 13th. Improved considerably; walks about. Is able to feed and dress herself. Can extend the wrist, and the arms are larger in bulk. Blue lines on gums and lips disappearing. On testing with faradization, there is marked contraction in the extensors, the hands being well lifted, this is more so in the left arm than the right, the right being always weaker and smaller.

In this case it may be remarked that besides a well-marked blue line along the edge of the lower gums there was a dark patch on the mucous membrane of the under lip, corresponding in position to that on the gums, but rather more defined and dotted. A question is always asked in the wards whether this mark on the lip is formed independently, or follows that on the gums from contact? The latter is the probable explanation.

In these cases of dropped wrist the back of the hand is often observed to be rounded, apparently from enlargement of the metacarpal bones, but due in all probability to some thickening of the theæ.

Case 5.—Plumbism treated with electric bath.—Wm. J., æt. 36, admitted under Dr. Wilks, July 17th, and left July 27th. He began to work at grinding lead nine months ago, and at the end of about five months commenced to feel ill, with loss of appetite, pains in his head and abdomen, and general debility. He continued at his work and daily grew worse, until a week ago, when he was obliged to desist, having pains in his limbs, sweating and inability to stand, and vomiting.

On admission: He was seen to be very pale and very thin, having evidently lost a great deal of flesh. Skin hot, tongue furred, marked blue lines on gums.

Constipation. Recti abdominis contracted and painful.

July 20th. Ordered an electric bath. This was made by Mr. Sandy as follows:—the bath being prepared, enough sulphuric acid was put into it to give it a slight acid taste (about $\frac{3}{4}$ iv), the negative pole of the battery, attached to a large sheet of copper about two and a half feet square, was put upright in the bath and the patient placed in it so as not to touch the copper plate; the hand of the patient was held out of the water and in it he held the positive pole. Fifty and eighty cells were tried, but when the current was applied to the neck instead of the hand the patient could not bear more than fifty cells. On marking and breaking contact the patient felt a kind of thud through the whole of the body. A bath lined with glazed tiles was used.

The patient used the bath again on the 24th and a third time on the 25th. He said he felt very cold after it. He always had his bowels relieved immediately after it. On each occasion he felt better, and on the 27th he was so much improved that he went out.—*Guy's Hospital Reports*, vol. xviii., 1873, p. 148.

ON OVARALGIA.

By Dr. T. CLIFFORD ALLBUTT, Physician to the Leeds General Infirmary.

If gastralgia be mistaken for dyspepsia, far more commonly is ovaralgia misunderstood. Indeed, the existence of ovaralgia, as I understand it, is by no means familiarly known to the profession.

The irritable uterus of Gooch was, and perhaps is, a phenomenon of which few medical men would be called ignorant; but I am sure that it is a very different thing to the ovaralgia of which I have seen many marked examples. I cannot say that uterine neuralgia is an ailment which has come very prominently before me, though, as all our experience is accidental, it may well be common for all that. Women, however, in my experience such as it is, complain to physicians far more often of unilateral pains and pains which are evidently perituterine, than of pains which are actually seated in the womb itself. For it is not quite accurate to give the name neuralgia to those uterine pains and irritations which accompany other disorders of that viscus. All the uneasiness and misery which result from displacements and from local diseases, such as ulcers or tumours, must of course be eliminated. Cases of irritable uterus, again, cannot be called cases of neuralgia proper, for in almost all of them there is also some menstrual disorder, or the pain attends the normal menstruation, when the necessary congestion burdens and irritates the hyperæsthetic tissue. In this view I am supported by the valuable opinion of Dr. Handfield Jones, and he will, I think, wish with me to preserve a distinction between hyperæsthesia and neuralgia. In my selection on gastralgia I have spoken likewise of gastric hyperæsthesia as occasionally implicating gastralgia, but it is not gastralgia; on the contrary, I have notes of many interesting cases of pure gastric hyperæsthesia

with which gastralgia was never associated, and which rather simulated ulcer or chronic gastritis. To turn also to the ovaries themselves, there is such a thing and a common thing too, as hyper-æsthesia of the ovaries, but this differs entirely from ovarian neuralgia, as I should describe it, in which the ovaries need not be very tender to pressure, though of course they sometimes are so continuously and often are so soon after an attack of pain. In ovaralgia there is often no disorder of function whatever, but acute aching or, it may be, agonising pain. This pain, when severe, is too often mistaken for urinary calculus, lithiasis, or even for peritonitis. This latter is a sad blunder, but I fear far from rare, if I may add my own observations to the warnings of Dr. Addison, who, says Dr. Jones, "appreciates fully the difficulty there may be in distinguishing abdominal neuralgia from peritonitis." The ovarian neuralgia to which I refer comes on either as a mere weight or burning, or as a true 'tic.' As in the case of Mrs. Mc—, it often comes in a moment and continues as an agonising paroxysm for one or several hours. The pain may dart from the ovary of one side, often thence downwards towards the perineum or upwards to the false ribs even to the arm pit, though sometimes we have to allow for a little exaggeration in descriptions of severe pain. The pain rarely occurs in both ovaries at once, though it frequently attacks them alternately. The occurrence of the pain does not seem to depend upon any well defined immediate cause, for it may occur at almost any hour of the day. Indeed, its demeanour is in every respect very like that of ordinary facial tic. There need not be and often there is no coincident local disorder of any kind, though a local cause of irritation—such as ascarides, for example—no doubt might determine an outbreak. At the same time I think sexual excitement may not unfrequently be accused of some complicity in the attack. This is a subject on which clinical questioning is almost impossible; but I have seen severe uterine neuralgia twice in newly married women, and once in a married woman who was believed by her own medical adviser to make great claims upon her husband. That the immediate cause of the attack in a predisposed person was in another instance the combined influence of cold and fatigue seems clear. As mastication again may bring on facial tic, and food may bring on gastralgia, so ovaralgia is often produced by quick walking or running. Ovarian ovaralgia will need the same general treatment as the other neuralgias; quinine and steel being more especially useful. As a palliative measure hypodermic morphia has the same marvellous value that it has in gastralgia and in every other form of nerve pain. But year after year adds to my conviction that the remedy is as dangerous as it is effectual. In a paper published some time ago in the Practitioner I drew attention to the unquestionable fact that the use of the morphia syringe tended even more surely to become a habit than the use of anodynes in other modes and forms. Those who have learnt to fly to the syringe, as a remedy from instant pain, soon discover that in it they find also a

most effectual stimulant. Delicate ladies, when under the influence of the injection, can stir about their houses, can frequent dinners and balls, can receive company at home and feel generally hungry, active and gay, to a degree before unknown to them. Hence its terrible fascination for them, a fascination which seemingly is as potent when once established as that of alcohol. Like alcohol, too, it creates the recurring need for its repetition. The dose may not be greatly increased, the sixth of a grain may not grow to more than half a grain or a grain, but the system claims it again and again, and denial seems cruel or even impossible. When the influence passes away a state of depression seems to come on,—a want, a sense that the lamp of life must be re-trimmed, and many persons have not the strength to resist this. Not only so, but this very reaction becomes the cause of a renewal of the neuralgia, so that the morphia treacherously keeps alive the very pains it pretends to relieve. A lady of great intelligence, and a great sufferer from neuralgia, told me that she discovered the temptation of morphia injections after the first half dozen operations, and she decided to bear pain rather than run the risk of becoming a slave to them. Among numberless cases of a contrary kind I may mention one of a brave lady, suffering from intense cervico-brachial neuralgia and habituated to the use of the syringe, who, in obedience to our urgent wish, broke the habit, and the pain gradually ceased to return. On the other hand a medical friend, who lives away from Leeds told me that a lady stopped him one day in the street, and begged him to give her an injection in his brougham, as her syringe was broken and her own medical man was away out of town. This lady was not at the time suffering from actual pain, and, much to her displeasure he declined to operate. Therefore I would warn my readers not under any circumstances to permit the use of morphia in this way to become periodical, or they will find the last state worse than the first. In old persons with neuralgias that are admittedly incurable the periodical use of hypodermic morphia may, as Dr. Anstie argued in a review of my paper, seem the lesser of two evils, and may not indeed be any great evil; but in younger persons it should be discountenanced for two reasons, namely, 1, the regular use of it sets up a periodicity in the system which actually favours the return of pain; and, 2, during that regular use all other treatment loses much or all of its power. Case after case has come before me, of late years, in which I have seen, not only the establishment of a periodic pain in spite of all remedies, but also, in addition to this, a love of intoxication, with slow and almost imperceptible deterioration of mental stability and calm intelligence which has defied all management. Several brave persons suffering from gastralgia, hepatalgia, facial tic, ovaralgia, &c., &c., at my urgent entreaty have broken off the habit, and in these cases, without any special treatment the neuralgia has *pari passu* given way likewise, while it had previously defied even the continuous current. Therefore I feel very strongly opposed to the regular use of this

potent remedy by neuralgic persons. It should not, generally speaking, be taken out of the hands of the medical attendant, and it should be used avowedly as a palliative on special occasions only, not at regular intervals. I need scarcely say that hypodermic morphia often cures neuralgia, and to this end may well be used for a few days consecutively, or several times a week. Still, the medical man must assuredly bear in mind that, if he does not cure the ailment, he is in danger of establishing a habit both of intoxication and of the neuralgia itself. With him the responsibility must rest of drawing the line between its use as a curative means and its use as an habitual palliative and stimulant. The same difficulties which have limited my experience of the continuous galvanic current in gastralgia, apply with even more force to ovariagia, in which complaint I have indeed never made a trial of it. Fortunately, so far as a few cases can prove, we seem to have in quinine, liberally given, an almost specific remedy. It may not act more decidedly in ovariagia than it does in trigeminal tic, but, curiously enough, it is at least equally valuable. In iron and arsenic then, as chronic remedies, and in quinine or hypodermic morphia, as immediate remedies, we may find a tolerably sure cure.—*Liverpool and Manchester Med. Reports.*

TREATMENT OF ACNE.

By H. D. BULKLEY, M.D.

(*New York Medical Record.*)

An elaborate paper on Acne, read by Dr. Bulkley at the New York Academy of Medicine, and followed by an interesting discussion, contains some observations on the treatment of this troublesome affection that may interest our readers.

Dr. Bulkley, differing strongly from the local pathology of the Germans, and believing in the internal origin of the disease in the great majority of cases, relies most on constitutional remedies, together with attention to diet and exercise. Constipation has in most cases to be combated, but not by ordinary purgatives, the abuse of which has brought discredit on their employment in the treatment of acne. Attention should be paid to diet, exercise and regularity in answering the calls of nature; and, when medicine is required, most success is derived from the employment of minute doses of aloes, combined with iron, given repeatedly after meals, and gradually diminished as the required effect is produced. He also prescribes a pill containing blue pill and compound extract of colocynth, of each two and a half grains, and one quarter of a grain of ipecacuanha, giving two such on alternate nights for awhile, and following them by Kissengen water. The dyspepsia which is so often present is usually of the acid variety, and much benefited by restriction in the use of starch and saccharine substances, and of ale, beer, and wine, as also chocolate, fried substances, pastry, and coffee and tea in excess. When a stimulant is required, whisky or brandy should be preferred to ales and wine. Exercise in the open air is

of very great importance, and neglect of it may be one reason why women are more liable to the disease than men. Dr. Bulkley has seen many cases injured by arsenic where this has been given in the early stages of acne; but he regards the remedy as serviceable later, when the eruption is drier and less inflamed, as a tonic having a special action on the skin. He has found acetate of potash serviceable in many cases, in doses of from fifteen to thirty grains, given in a considerable quantity of water between meals. It will not, however, effect a cure, tonics being afterwards required. Dilute nitric and phosphoric acids, with vegetable bitters, have also yielded good results, as also Kissengen water in pint doses before breakfast, the beneficial effects depending not upon its purgative principles, but upon its alkaline properties. Cod-liver oil, with iodide of iron, is useful in scrofulous subjects, and a mild mercurial course may be resorted to when there is suspicion of syphilis. Dr. Bulkley, although attaching by far the most importance to general means, finds that local means will hasten the cure, and the best of these is a lotion composed of sulphuret of potash and sulphate of zinc, of each a drachm to four ounces of rose water. He has used collodion in order to contract the capillaries in acne rosacea, but without any permanent effect; and he has laid open the veins in this affection with some good results. One drachm of iodide of lead to one ounce of stramonium ointment has been of use in reducing thickening in indurated acne, and citrine ointment, diluted three times, has been of service in acne rosacea. Juniper and tar soap is of value when there is not much inflammation; but bichloride of mercury has not justified the frequent use that is made of it.

Dr. Weisse, after the correction of the constipation and dyspepsia attendant upon the disease, gives a decided preference to local treatment. After a thorough trial of the internal use of arsenic, he is convinced of its inefficiency. Iron, and particularly the iodide, he has found useful in scrofulo-anæmic patients. He is able to testify to the success of Gubler's treatment by glycerine, and he has found with him that the subjects of this disease usually exclude fats of all kinds from their food. He therefore gives from half a pint to a pint of cream daily, as also almond or olive oil, and he explains the successful use of cod-liver oil by the same theory. In tropical treatment he regards as the first essential the careful emptying the follicles of their contents, which may be done by a fine needle and well-directed pinching of the orifices. Next, inflammation should be allayed by warm water rendered milky by kneading a bag of bran in it, and used as a douche for ten or fifteen minutes two or three times a day. After trying all the applications that have been recommended, he gives the preference to those which are not irritating. Chronic papular and tubercular lesions, however, require nitrate of silver or more powerful escharotics. For the last two years Dr. Weisse has used with advantage an ointment composed of suet carefully worked up and scented, and a powder of equal parts of subnitrate of bismuth and prepared chalk. Before going to bed the patient

uses the hot bran douche, and after careful drying the suet is gently applied to the face and left on. In the morning the face is not to be washed, and is to be freely powdered with the powder by means of a puff. In ten or fifteen minutes this is to be brushed off with a very soft brush, and carries the ointment with it. The redness and burning in *acne rosacea* are effectually allayed by an ointment consisting of sulphur 3 ss, pulverized camphoræ gr. v, adipis 3 j, applied two or three times a day.

Dr. Peters considers acetate of potass as one of the most useful of remedies when the urine is scanty and dark-colored. In doses of from 20 to 40 grains it is a mild and efficient diuretic, not only increasing the quantity of urine, but also of its solid constituents, in a remarkable degree—acting as a depurative and eliminative remedy. The carbonate of potash, too, is an antacid, alterative, and diuretic, and in inflammatory *acne* ten or more grains may be given with from three to five grains of nitrate of potash a few hours after meals. Borate of soda is a refrigerant, diuretic, and emmenagogue, in doses of five to thirty grains; and Copland strongly recommends it for external use. A good lotion may also be made of Borax 3 j, alcohol 3 ss, water 3 iijss; or borax 3 ss to 3 viij water; or borax 3 ss to aq. flor aurant. and aq. rosar. aa 3 ss. It is especially useful in *acne* attended with amenorrhœa and uterine disease. When there is constipation with amenorrhœa, three or four grains made into a pill with one grain of aloes is very useful. The muriate of ammonia is very useful when there is amenorrhœa with bilious derangement—given in five or ten grain doses three times a day in water, or made into a pill with aloes. It should also be used as a lotion. In very obstinate cases of *acne indurata*, and *rosacea*, the iodide of sulphur may be given in quarter or half-grain doses, increased to one or three grains, aided by an ointment containing five, ten or even thirty grains to the ounce of cerate. The green iodide of mercury is useful, also, in the indurated variety, and especially when there is an old chronic disease of the liver. It may be given in quarter or half grain doses, combined with conium or aloes, and an ointment (five to ten grains to the ounce) may be applied. In obstinate and rebellious cases, the ammonia-chloride of mercury (five to ten grains to the ounce) is useful.

Dr. Howard says that he has used all the various local applications for *acne*, but had found none of great value. If evulsion can be provoked without too much irritation, the worst follicles may be emptied at the outset; and any remedy which prevents desiccation of the orifices and keeps the skin pliant is indicated. Constitutional treatment, according to the indications present, is what should be chiefly relied upon. Constipation is a very common coincident, and this is best treated by cream of tartar taken as a drink morning and evening in sufficient quantities to become slightly aperient. If there be indigestion, especially combined with acidity, the following powder may be given three times a day:—
℞ Pot. bitart. et sod., 3 j; rhei pulv., gr. x; bis-muth subnitr., gr. x; sod. bicarb., 3 j—divide in

pulv. x. Under the use of this remedy the great majority of cases get well.

Dr. Taylor is of opinion that the essential point in topical applications should be to stimulate, and that want of success is often due to lotions being too mildly applied. He has derived benefit from sulphur, and especially from a lotion formed of lac sulphur 3 ij, spt. camphor 3 ij, water 3 iv. This should be rubbed firmly into the skin and allowed to dry over night, anointing slightly with cold cream in the morning. He has also derived benefit from iodide of sulphur ointment and from lotions of bichloride of mercury, from two to five grains to the ounce. Both he and Dr. Draper, at the College clinic, have seen marked advantage from the application of caustic potash solution (twenty to forty grains to the ounce), which is freely applied to the spots and allowed to dry, being afterwards washed off by very hot water. This is done at night, and next day the face is smeared with cold cream. Although *acne* is a troublesome affection, there is no necessity for the amount of polypharmacy that has been expended upon this disease, as relief can be obtained from sulphur, iodine, mercury and potash. He has seen good results from mild ointments of red oxide or deuto iodide of mercury, and in many cases from mercurial plasters. He has been disappointed in the use of diachylon ointment recommended by Hebra, having found it slow and unsatisfactory. In *acne* of the nose the scarifications recommended by Hebra are absolutely necessary, and of great use. Not only should applications stimulate sufficiently, but they should not be changed too frequently, many failures being due to the remedies being continued for too short a time.

Dr. Caro states that he had been led by accident to discover that, while not neglecting internal remedies, obstinate cases of *acne* may be effectually treated by solar heat. He concentrates the sun's rays upon the part by means of a lens until the whole periphery is well burned. In a short time the skin becomes intensely red, and small vesicles full of serum begin to appear. These discharge during three or four days, when the healing commences, leading to the final cure. Cloths wrung out in cold water soothe the pain caused by the heat, and promote free secretion. If the *acne* is only a follicular affection of certain parts of the skin, with abnormal secretion, this blistering action of the sun is the best remedy, although the process is a painful one.

CARBONATE OF AMMONIA IN SCARLET FEVER.

By G. J. S. CAMDEN, Esq., Rhyl.

The following treatment of scarlet fever has come down from master to pupil through four or five generations of medical men,—to myself from a partner I joined in 1828—therefore extending over a period of nearly 150 years. I was nearly losing a patient, when my partner told me if I persisted in treating scarlet fever *secundum artem* I should lose many; He then told me what he had been taught by his master, and had used for thirty years with the great-

est success. I adopted his system, and am fully satisfied with the results. Never give emetics or aperients, nor bleed, nor use leeches, nor do anything to lower the power of life, but give ammon. carb. on the very onslaught of the disease, the earlier the better, when it will cut the disease short. I used it as follows: *R.* Ammon. carb. gr. x. vel gr. xij., aquæ 3 iv., 3 vj., vel 3 viij.—for 16 years and above. *R.* Ammon. carb. gr. viij. vel gr. x., aquæ 3 iv., 3 vj., vel 3 viij.—12 year to 16 years. *R.* Ammon. carb. gr. vj. vel gr. viij., aquæ 3 iv., 3 vj., vel 3 viij.—6 years to 12 years. *R.* Ammon. carb. gr. iv. vel gr. 3 vj., aquæ 3 ij. vel 3 iij.—4 years to 6 years. *R.* Ammon. carb. gr. ij. vel iv., aquæ 3 j. vel ij.—2 years to 4 years. Unless distilled water be used it must be cold boiled rain-water filtered, the dose to be taken every two, four, or six hours, according to the severity of the throat symptoms; the quantity of water to be regulated on the same principle. The worse the throat the stronger the dose of ammonia, the smaller quantity of water, and to be given most frequently. The choking from the ammonia is instantly relieved by a small quantity of cold water, but if done without the better. If the power of life is at a low ebb, wine or a tea spoonful of brandy, and the same of water between each dose, and beware of aperients. I have waited five or six days. The foregoing prescriptions I sent to a lady in Ireland, who had seen the effect in eleven cases in her own house. In the original treatment in cases in which the tonsils had become gangrenous, the following was used as a gargle:—*R.* Rad. pyrethri 3 iij., aquæ 3 xvj., decoque at 3 x. et cola; adde syrup. rheados 3 ij.—*M.* Gargar. sepe utend. My partner used it whilst with me but once; I never used it, though I had one extremely severe case with gangrenous throat, through the nurse's negligence. There were twenty two patients in the house—a school—and none died. I only used the ammonia and the brandy. In each case the child recovered. I never used leeches but once—the child being delirious—and then put on only two, and as soon as they came off stopped the bleeding. In my severe case ascites supervened, which nothing relieved. After several months in dread of paracentesis the umbilicus ulcerated, the cavity emptied, the child recovered, and grew a fine young woman. One great essential is the room kept cool and well ventilated.

Some few of my medical brethern have followed the treatment on my telling them, and were as much satisfied as myself; but most are incredulous. I never lost a dozen patients from scarlet fever in the course of twenty-five years, though I lost two in forty-eight hours in one house; but that was the abominable situation of it—the corner of a small wood into which the drainage from a large farm yard ran in close proximity.

About the year 1838 (I think) there was a letter in the *Lancet* in which the use of ammon. carb. in scarlet fever was mentioned as a new discovery by a German M.D. Since then two letters have appeared in the *Times* from Dr. C. Witt—one on December 1, 1858, the other I forget when. Of diphtheria I know nothing, but believe it to be only another

phase of scarlet fever. Of the sequelæ you have less after the ammonia treatment, having seen but little; and, should anasarca supervene, it will readily yield, as I have of late years found (with alternate doses of quinine as a tonic), to liberal doses of potass. bicarb. (Howard's) with potass. nitrat. taken in a large quantity of water. The potass. nitrat. I use is to be obtained only at powder makers'. It has been melted by heat and kept so far two or three days, so that all waters of crystallization is driven off. I mention this as I have always used it, and fancy I should not get a similar effect from any other. The sudden retrocession of the eruption I never knew to be of consequence; but the most severe and frequently fatal cases are usually those in which the eruption does not appear, and these cases are more frequent than is supposed, and are not suspected till too late. To my eye there is such a peculiar appearance of the throat it cannot be mistaken.—*Medical Times and Gazette*, Feb. 1, 1873, p. 131.

INFANTILE ENTERALGIA.

Dr. John Boyd, in an interesting paper (*Edin. Med. Journal*, Feb. 1873) on an affection which he terms "infantile enteralgia," remarks: "In male children especially, from two weeks to four or six months, of a lively mobile temperament, we very frequently observe them subject to attacks of abdominal pain, which come on suddenly, generally at night, commencing at a little after twelve, and continuing with slight intermissions to four or five in the morning. The little sufferer draws up its kness and tosses about in the nurse's arms; the cry varying from an agonized scream to a plaintive wail, with intervals of sobs and long-drawn breaths; but neither the pulse nor the respiration is accelerated, nor is there usually any abnormal elevation of temperature. The natural language of the malady denotes unmistakably that the bowels are the seat of the pain, though the tenderness on pressure does not seem excessive. After a time the local uneasiness appears to have produced a quasi-hysterical action on the nervous system. If the infant be old enough to be attracted by any glittering object, or a series of moderately loud noises, he may forget his woes for a time, and all at once recollect them and resume his ululations as vehemently as before; bearing on his countenance that expression of conscious ill-usage which is so generally seen in those afflicted beings of maturer age and opposite sex, of whom it has been quaintly remarked that they are so very ill because there is so very little really the matter with them. After disturbing the whole household for the best part of the night and exhausting all the curative efforts of the establishment, the young gentleman falls quietly asleep, and seems so well and fresh next day that the history of the direful nocturnal events sounds like a baseless romance when related even to sympathetic auditors. Yet such experiences constitute one of the most painful trials which the youthful primipara is called upon to undergo, although Mater-familias of fifteen or twenty years' standing sustains them in general with philosophic equanimity.

"The enteralgia referred to does not commonly depend on mere fecal accumulation. In thriving children who are not as yet subjected to the pangs of teething, the alvine evacuations are comparatively scanty so long as the maternal lacteal secretion is the sole or preponderating source of nutrition. In such cases I have invariably noticed, that so long as the abdominal suffering lasts, the urination is suspended, that a true ischuria renalis exists for the time being; and that whenever micturition occurs the crying and distress cease, presenting exactly the same termination as that of the *passio hysterica*—the copious flow of a large quantity of clear limpid fluid. Acting on this indication, I have for many years past been in the habit, whenever such attacks were brought under my care, of prescribing from eight to ten minims of *spiritus etheris nitrosi* in a drachm of water, to children of the age above mentioned. Generally after the administration of this draught there occurs a discharge of flatus from the superior or inferior orifice of the alimentary canal—the ether acting as a diffusible stimulant and carminative; but without exception the passage of urine in large quantity takes place within a few minutes after its imbibition, the cries cease, and the small patient sinks into a refreshing slumber. Whatever view may be taken as to the causation of the malady in question—whether it may depend on a non-secretion depending on a temporary congestion of the glomeruli of the kidney or a partial paralysis of the more elaborated and complex urinary passages of the male, or merely from the presence of flatus in the colon mechanically suspending the renal function,—the fact is well ascertained that the phenomena above depicted are extremely frequent in male infants of all classes, and every variety of social and hygienic surroundings; also, that in some instances very serious mischiefs have been the consequence of such nocturnal pervagitus."

URGENT AND PROLONGED DYSPNOEA COMING ON SUDDENLY AFTER LABOR.

Dr. J. J. Phillips, Ass. Obstet. Phys. to Guy's Hospital, relates (*Brit. Med. Jour.* vol. May 3, 1873) the following interesting case of this in a married lady, æt. 36, to whom he was called Dec. 30th. She had been delivered of her fifth child at 2 P. M., after a perfectly natural labour, and continued to do well until 6 P. M., when she complained of oppression and began to gasp for breath. Dr. P. saw her at 9 P. M., when her condition was most alarming. She was sitting up in bed, supported by pillows; the dyspnoea was most urgent; respirations 48, pulse at wrist 140; "respiratory murmur could be heard over the chest in front and behind; there was no abnormal sound accompanying the heart's action, but the first sound was muffled; the legs and the forearms were quite cold; the lips were livid; the face was pallid. She endeavoured on one or two occasions to speak, but could only articulate one word at a time. The history of the case and the symptoms seemed to point unmistakably to a coagulum in the pulmonary artery; and it seemed to us

that the treatment should be directed to support the heart's action as much as possible, and this was done by repeated doses of brandy, which with some difficulty were swallowed in soda water. Five-grain doses, increased to ten grains, of carbonate of ammonia were given at short intervals, and warmth was applied to the extremities. I remained about an hour. The case seemed hopeless. At nine o'clock next morning, however, I found her much relieved. She was able to assume more nearly the horizontal posture; the extremities were warm; the breathing was much more easy, and only thirty per minute; the pulse still very small, 120 per minute; temperature in the axilla, 97° Fahr. Symptoms of improvement had commenced about four in morning. Her husband and another medical man who sat up during the night, believing that the carbonate of ammonia was doing good, had continued its use in increased doses, so that in twelve hours she had taken two hundred and ten grains of it. The stomach tolerated this large quantity in a remarkable manner. "She was a little sick two or three times." The brandy had also been continued, and she had taken a little beef-tea in the early morning. In the evening, she was in much the same condition as in the morning; frequency of pulse and respiration the same; temperature only half a degree higher (97.5° Fahr.). She still complained of pain in her chest. During the night some hours of sleep were obtained, and the next day she was more comfortable in every respect. The respiration had fallen to from twenty to twenty-five per minute; temperature, 99° Fahr.; no abnormal cardiac sound. The strictest rest was maintained. On the sixth day there were some pyrexial symptoms; and on the seventh she began to suffer from severe sickness." She however soon improved.

Dr. P. thinks that it is impossible to explain the symptoms in this case upon any other hypothesis than that of pulmonary embolism. He thinks it "probable that a loose clot which had formed in the right side of the heart was driven into the pulmonary artery, giving rise to the urgent dyspnoea which supervened so suddenly. The patient told me that throughout the day she had felt a little shortness of breath. Given that a clot found its way into the pulmonary artery, it is of course quite conjectural what changes took place in it; but it is not improbable that a loose clot might undergo such contractions as to allow the gradual re-establishment of the circulation, coincident with the slow improvement in the general symptoms. Different opinions will doubtless be entertained as to the share which the carbonate of ammonia had in relieving the symptoms, by reducing the hyperinosis of the blood which existed at the time. The large quantity of this alkali which was taken in twelve hours is specially deserving of notice. I am not aware that it has been given continuously for twelve hours in such large doses at such short intervals. Dr. Richardson, in one of his valuable contributions to the subject of thrombosis, gives reasons for administering the liquid ammonia rather than the carbonate; but when this case occurred I had not read Dr. Richardson's

remarks on this point. Another fact of interest in the case now reported, is the low temperature which continued throughout the day succeeding the most severe symptoms.

TREATMENT OF SCARLET FEVER.

By T. W. EGBERT, M.D.

(Transactions of the Pennsylvania State Medical Society.)

Dr. Egbert discards the idea of varieties, believing scarlet fever to be one and the same disease, in all places and under all circumstances, modified by atmospheric, hygienic, and other known and unknown influences. His treatment, from beginning to end of a recent epidemic, was uniform, simple, and he thinks novel to many practitioners; but he wishes the successful results to speak for themselves. He treated two hundred and seventy cases, with but a single death; and in that case his directions were reversed by the nurse, who applied hot instead of cold applications to the throat. From the incipency of the disease until the desquamation is perfect, he prescribes the following mixture:—R. Acid. muriatic, f 3 j; Syr. simplicis, f 5 ij; Potass. chloratis, 3 iij; Aquæ rosæ, f 3 iv. Mix. Sig. Half tablespoonful every two hours. The dose designated in the above prescription would be for a child six years of age, double the amount being necessary for an adult, and smaller quantities for a younger child. Where there is much restlessness and nervous irritability he administers paregoric in sufficient quantities to soothe the patient and allay those symptoms. He never found it necessary to use gargles, probangs, or the pencil to the fauces or throat. In one case—that of a male adult, aged twenty-four married; confined to his bed, with the characteristic scarlet blush making its appearance on the face and neck; general symptoms all present in an aggregate form; he prescribed R. Acid. muriatic, f 3 ij; Syr. simplicis, f 5 ij; Potas. chloratis, 3 iv; Tr. opii camph. 3 j; Aquæ rosæ 3 fiv. Mix. Sig. Tablespoonful every two, three, or four hours. As to this case, he says: "This was the principal treatment until the twelfth day, when the febrile symptoms had all subsided and desquamation well advanced; with the exception of simple tonics, continued for ten days or two weeks longer this was the entire treatment of this case, and in sixteen days from the first appearance of the blush he was at the office, attending to his ordinary business, being an oil broker. The reader can judge of the severity of this case and of the efficacy of the treatment, when I state that there were no bad sequelæ, except perfect *onychoptosis* of both hands and feet. In a few cases where there was much congestion about the fauces and throat, ulceration of the uvula and fauces, and enlargement and induration of the parotid and submaxillary glands, I found it necessary to use the ice-bag, applied snugly to throat and neck until relief was obtained, which was generally in from six to twenty-four hours, being careful not to freeze parts by continuous application too long at a time.

CLINICAL REMARKS ON EMPYEMA.

By SAMUEL WILKES, M.D., F.R.C.P., Senior Physician to Guy's Hospital.

In empyema the lung of the affected side becomes contracted, condensed, and unable to expand; consequently when the fluid in the pleural sac becomes absorbed, the chest walls gradually retract. On the healthy side the lung becomes the seat of a compensatory hypertrophy, just as one kidney enlarges if the action of the other be interfered with. The cure of a case is therefore very tedious, as time must be allowed for the recession of the firm and resisting chest wall. The walls must fall to the lungs, as the lungs cannot expand to the walls. It is impossible for the lung to expand when covered with a layer of lymph. Dr. Wilkes was unable to expand a lung post-mortem by means of the bellows, in a case of pleurisy of but six weeks' duration, but when he removed the layer of lymph from the visceral pleura, expansion was readily performed. If there are no signs of absorption of the pus, it is the best treatment to make an opening into the sac, and evacuate the contents. The cavity will then gradually close, partly by the formation of granulations, but chiefly by the recession of the chest walls. Care must be exercised to prevent decomposition of the matters that collect in the sac. This is best done by washing out the cavity several times daily with some carbolic acid solution or Condy's fluid.

ON THE TREATMENT OF CHRONIC DYSENTERY.

By STEPHEN H. WARD, M.D., F.R.C.P.

(Medical Times and Gazette.)

The first thing to be insisted upon is rest in bed, and in the recumbent position, in which the bowels are best kept quiet.

Diet stands next in importance to rest. That kind of diet should be ordered which gives least work to the alimentary canal, and which is most likely to be assimilated should the mesenteric glands be implicated, and which will send down to the large bowel a minimum amount of irritating waste material. Milk is the best form of nourishment in these cases; flour boiled with milk is a good combination; farinaceous articles of diet are also admissible. As a rule the patients do better without alcoholic stimuli; but where there is much prostration these must be given.

It is important that an even temperature should be maintained in the bed room or ward by night as well as by day. It had long been remarked that patients passing, say, twenty stools in twenty-four hours, would pass a large proportion of them in the night time. The action of the skin, which it is desirable not to check, can be evenly maintained in bed. Dr. Ward has found the application of a broad flannel roller in some cases to do good by carrying out the indication of support and local surface-warmth. During the period of convalescence, flannel next the skin, and otherwise adequate clothing, are essential.

Special remedial agents render important service

in the relief of various symptoms. An occasional dose of opium at night, where there are irritability and restlessness, may be given, not to lock up the bowels, but with a view of procuring sleep. A dose of castor oil guarded with laudanum, is often of service in bringing away scybalous fecal matter that has been retained, and caused griping and distress. For the tenesmus from which some patients suffer so much, an injection of starch and opium is the best remedy. The possibility of irritation being kept up by hemorrhoids must not be lost sight of. The severe and oft-repeated straining in the earlier stages of the disease gives rise at times to prolapsus ani, which in the more advanced stage may become a source of annoyance, and require surgical aid.

The complexion and course of chronic dysentery may be modified by the association of some special cachexia, as that of scurvy, ague, or tuberculosis. Where such exists the treatment will have to be modified. Where there are evidences of scorbutic taint, lime or lemon-juice must be given. It is here that the Bael fruit, which has enjoyed so much repute in India, will be found useful. If there be any old malarious influence at work, the symptoms will exhibit periodicity—the patients will perhaps be worse on alternate days, and then quinine will be the remedy. Where cough, hectic, etc., point to the tuberculous diathesis, cod-liver oil and tonics are indicated.

GLYCERINE OF BORAX IN FACIAL ERYSIPELAS.

Prof. D. M. Salazar, of the Hospital Nacional, Madrid, reports that he has cured eight cases of facial erysipelas in 48 hours by this remedy. Notwithstanding the rapidity with which the affection disappeared, there were no consecutive pathological affections. In one case, the disease had existed three days before treatment was commenced, and there was bilious vomiting, intense cephalalgia, high fever, inflammation of the entire face, and some phlyctenulæ in the vicinity of the right lower eyelid and the root of the nose. He applied the solution to the diseased parts with a brush and then covered them with a mask of raw cotton. After 24 hours all the symptoms, local and general, were notably diminished, and the next day all the phlyctenulæ had disappeared and desquamation was commencing.—*El Amfit. Anat. Espan.*, Mar., 1873.

CROUP.

Dr. W. W. Parker, of Richmond, Va., (*Virginia Clinical Record*), relates a case of croup in which inhalations of lime proved efficacious. The most dense vapor is not at all unpleasant, and can be borne as well as the ordinary atmosphere of a heated room.

RUPTURE OF THE ŒSOPHAGUS.

Dr. James S. Bailey, of Albany, N.Y., (*Phil. Med. Times*), reports the history and post-mortem appearances in a case of rupture of the œsophagus occurring near the cardiac orifice of the stomach, causing collapse and death in twenty-four hours from its occurrence. In this case the accident was prob-

ably due to a violent fit of vomiting. The lesion in a sound œsophagus is a rare one. Von Oppolzer reports having seen but one case.

IODIDE OF POTASSIUM IN SYPHILITIC SKIN DISEASES.

Dr. McCall Anderson (*Med. News and Library*) lays down the following rules with regard to the employment of iodide of potassium in the treatment of syphilitic skin diseases:—

1st. The longer the interval which has elapsed between the contraction of the syphilitic taint and the development of the eruption, the more confidently may we substitute it for mercury.

2d. If the patient is cachectic, it is, as a rule, to be preferred to mercury, except in recent cases of syphilis, when the mercurial vapor bath, or some such treatment, is more likely to prove successful.

3d. The more extensive the tertiary eruption, the more certain it is to yield to the iodide of potassium; although to this rule there are numerous exceptions.

4th. If there is any tendency to syphilitic disease of the nostrils or neighboring parts, iodide of potassium should be withheld, or given with great caution, for, if it produces coryza, it is very apt to aggravate the morbid condition of the parts.

5th. It should be given in full doses.

It is generally advisable to prescribe it in combination with a bitter, and, in cachectic patients, a little iron is a valuable addition, as in the subjoined prescription: Ammonio-citrate of iron, 3 iij.; iodide of potassium, 3 i.; syrup of ginger, 3 vi.; comp. inf. of gentian, 3 viij.; water to 3 xxiv. A table spoonful in a large wine-glassful of water, thrice daily.

COMBINATION FOR CHRONIC DIARRHŒA.

Rayer (*Union Medicale*, No. 73) advocates the combination of cinchona, charcoal, and bismuth in the management of chronic diarrhœa in these proportions: Subnitrate of bismuth, 3 j.; cinchona, yellow, powdered, 3 ss.; charcoal, vegetable, 3 i.; M. chart. xx. S. Two or three times daily during the intervals between meals.

THE TREATMENT OF WHOOPING COUGH.

By W. BERRY, L.R.C.P. and L.R.C.S. Edin.

(*Medical Times and Gazette*, Feb. 28.)

Mr. Berry has found dilute nitric acid, in doses of from five to fifteen minims—according to age—with simple syrup, given every three or four hours, to alleviate the cough and spasm, and apparently cut short the disease.

TREATMENT OF PYROSIS.

By J. BRADEN, M.R.C.S.

(*The Lancet*, Feb. 22.)

For the treatment of pyrosis, Mr. Braden recommends ten grains of subnitrate of bismuth, with five grains of the compound kino powder, suspended in thin mucilage, three times a day.

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EDITOR:

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MONTREAL, SEPTEMBER, 1873.

The Meeting of the Canadian Medical Association, which was held at St. John, New Brunswick, on the 8th of last month, was in every respect most satisfactory. It was the first session where all met, feeling that nothing likely to disturb its harmony, or cause acrimonious or sectional feeling, was likely to occur, and where the really legitimate work of the Association was entered upon. Although the full quota of literary food which the members were lead to anticipate was not forthcoming, owing to a circumstance which will we believe not occur again—yet there was sufficient provided to cause those who were in attendance to feel that the Association had at last adopted a programme calculated to induce the thinking and working men of the profession to attend its future meetings. The address of Dr. Botsford, of St. John, N. B., on Hygiene, we are assured, was a report embracing a vast amount of information, and shewing very great research, while the paper on *Surgery* by Dr. Hingston of Montreal, which we will publish in our next number, was one of especial value as regards Canadian Surgery. The attendance from Ontario and Quebec was small—the former Province being represented alone by Dr. Grant of Ottawa—but the profession of the maritime provinces were present in considerable numbers. Of the hospitality of the St. John profession, too much cannot be said. It was lavish in the extreme—one of the most pleasant re-unions being a lunch given at the house of Dr. Bayard—one of the leading physicians of St. John, and an earnest member of the Association. The next meeting will take place in 1874 at Niagara Falls—and the programme of papers announced as in preparation promises that in interest it will excel any former gathering. This, with the magnificent locality chosen for the meeting, will do much to attract a large number. Altogether, we think the literary start which the Association made at Montreal in 1872 was a good one, and if its members are active and energetic, we look for a prosperous career for the Canadian Medical Association.

REPORT OF THE MEDICAL SUPERINTENDENT OF ROCKWOOD LUNATIC ASYLUM, KINGSTON, O.

We have received from Dr. Dickson, the Medical Superintendent of the Lunatic Asylum, at Rockwood, near Kingston, his report for the year 1872; it is tersely written, and really is a very able document. We confess to somewhat like amazement, at the improvements he has accomplished, and many of them certainly under great disadvantages. Besides his ability as a medical superintendent, which is admitted by all who know him, the report proves Dr. Dickson, to be equally alive to the interest of his country, as is proved in the following extract:

"Different branches of industry are not only beneficial to the patients in a hygienic point of view, but by utilising the labour of the inmates, I have been able to effect an immense saving to the country, so that by this and other means I have reduced the cost of maintenance of the patients fully thirty-three per cent., and, in addition to all this, the improvement I have effected on the property by the agency of the patients has increased its value four-fold."

In Ontario, there seems to be the same difficulty in having the wants of lunatics attended to, that we have in the Province of Quebec. A wall commenced three years ago, and completion of which is necessary to allow the female patients to take proper exercise, has according to the report not advanced in the slightest degree for two summers, a condition of things which is but mildly expressed by the term, disgraceful. We trust that the report on this subject will have the effect that it should, and that the next summer will see the exercise ground of the female patients so protected, that all can enjoy and profit in health by it. The report also draws attention to a point which is really so important, that we feel it our duty to say a word or two upon it. It is with reference to the associating criminal lunatics with others who are not criminals, as is now done at Rockwood. Dr. Dickson says:—

"It is the universal opinion of all persons having anything to do with the management of lunatic asylums, that the criminal and non criminal classes of lunatics should never, under any circumstances, be admitted for treatment to the same building. They should never be permitted to commingle, as one vicious criminal lunatic is sufficient to contaminate a whole ward full.

The more rational the ordinary lunatics become, the more safely and easily are they managed; but with the criminal class it is totally different. The more rational they become the more dangerous they become, as they enter into plots to attack their attendants, and devote themselves to plan modes of escape, into both of which they try to enveigle other

patients into whose minds no thoughts of the kind would ever enter were they not influenced by persons of depraved habits.

The criminal is generally a man of low brutal instinct, and this trait of his character will always shew itself whether he is sane or insane, and when placed in an asylum among respectable patients, instead of being influenced by any efforts that may be employed with a view of working some reformation in his character and conduct, he only seeks to pollute others, and his intercourse with them is manifested by the mischievous and pernicious effects that follow in his trail. And besides all this, respectable patients are exposed to great danger in coming in contact with men who never in their sane moments had the most distant idea of the rights of property, or never placed any value on human life when it stood in the way of their perpetrating some gross outrage."

These observations are most important and action upon them should not be delayed. Separated they must be, and the foolishness of delay may be illustrated sooner than is dreamed of.

The average number of patients during 1872, was 361.51. During the seventeen years that the asylum has been in existence, only 28.73 of all the admissions have recovered; 23.62 per cent. died, and 46.74 per cent. of all admitted are still in the asylum. This is not a favorable record, and leads us to fear that in Ontario cases of insanity are not sent to the asylum for treatment, till all hope of benefit from treatment is passed. In the Province of Quebec, lunatics are generally sent to goal and kept there till they become permanently insane and hopeless, when they are sent to the asylum to become permanent burdens on the province. The record of the Rockwood Asylum would almost lead us to believe they followed the same plan in Ontario; we hope, however, for the credit of our own sister Province, that in this matter they show common sense. Perhaps there may be some blame for this in using the term Asylum, which leads many to think it is a place for *keeping*, not *curing* unatics. For ourselves, we prefer the term, "Hospitals for treating the insane," and think that considerable good would follow its employment.

FLINT'S PRACTICE OF MEDICINE.

A new edition of this standard work on Practice of Medicine has just been received by us. It contains nearly one hundred pages of additional matter principally upon diseases of the nervous system, and the entire volume has been brought up to date. As a book on Practice for constant use, there is perhaps none superior to Flint, and we very strongly recommend it to the notice of those of our readers, who may need such a work.

PERSONAL.

Dr. G. P. Girdwood, professor of Practical Chemistry, McGill College, has just returned from England, where he has been on a brief visit to his relatives.

J. B. Edwards, D.C.L., F.C.S., professor of Chemistry and Practical Chemistry, Bishop's College, sailed on the 30th of August, for England.

Dr. Shaw, lecturer on Chemistry in Bishop's College, has returned to Montreal, after a visit of a couple of months in England.

Dr. Trenholme, professor of Diseases of Women and Children, Bishop's University, performed ovariotomy on the 2nd of September; on the 8th, the patient was progressing favourably, not having had a bad symptom. The tumor weighed 30 lbs.

Dr. Eugene Nelson, of Fourth Avenue, New York, has been in the city, on a short visit to his relatives, *en route* for Kamouraska.

Dr. Farley, graduate of McGill College, 1873, was in the city for a few days, on his way to the London Hospitals.

Reports of Societies.

(Sixth Annual Meeting of the Canada Medical Association,) St. John N. B., 6th Aug., 1873.

The President, Dr. Grant, called the meeting to order at half-past 10. The following members being present, Drs. Cote, Grant, C. C. Hamilton, W. Bayard, Parker, W. S. Harding, S. L. Earle, Wickwire, Steeve, Botsford, Hingston, David, Turgeon, Bayard, Keator, Travers, Boisse, Robillard, and G. A. Hamilton.

Dr. C. C. HAMILTON, seconded by Dr. EARLE, moved,—“That Dr. David be requested to act as *pro tem* Secretary, in the absence of Dr. Peltier, general secretary.”—Carried.

The minutes of the afternoon meeting of the last Session were read and confirmed.

Dr. DAVID read an excuse from Dr. Peltier for his absence from this meeting, and Dr. Steeve read one from Dr. Marsden.

Dr. HINGSTON, seconded by Dr. BAYARD, moved an expression of regret at the cause of absence of Drs. Marsden and Peltier—the former—the illness of his wife—the latter—the death of a beloved daughter.

The following gentlemen were elected ordinary members:—Drs. W. Nelson, Christie, Vail, Daniel, J. F. Black, R. C. Thompson, Waddell, McLaren, McPherson, Burnett, P. R. More, Blanchard, Tra-

vers, R. Inches, Gove, Chas. Inches, T. J. V. Earle, Wilson, Black, Fisk, Jordan, Seymour, T. W. Smith, Gregory, G. T. Harding, Atherton, Cobourn, Simpson, McMonagle.

The President then read his address which will be found among our original communications.

Dr. BAYARD, seconded by Dr. KEATOR, moved a vote of thanks to the president for his able address, and that it be published in the Transaction.—Carried unanimously.

Dr. HAMILTON read the report of the Committee on By-laws.

Dr. HINGSTON, seconded by Dr. PARKER, moved,—"That the report be received and printed in the transactions, and discussd at the next meeting."

Dr. STEEVE would like the report to remain on the table till the afternoon Session.

After a few remarks from Dr. Harding,

Dr. HINGSTON rose to a point of order, and the President decided in favor of Dr. Hingston's motion.

No other Committee reported.

On the motion of Dr. HINGSTON, seconded by Dr. PARKER, Drs. Waddell, G. A. Hamilton and Hardy were appointed a committee to examine the treasurer's books.

Dr. STEEVES then announced the arrangements for the meeting:—to adjourn at half-past 1, to meet at half-past 3, adjourn at 6, and meeting in the evening at 8.

Dr. HINGSTON next read his paper on Surgery, on the conclusion of which,

Dr. FITCH, of Portland, delegate from the Maine Medical Association, entered and presented his credentials.

The meeting then adjourned.

AFTERNOON SESSION.

The President assumed the chair at $\frac{1}{2}$ to 4 p.m. The minutes of the morning session were read and approved.

Drs. DeVeber, Ed. Farrell, T. G. Dawson, Sheffield and Walker were elected members.

Dr. GRANT, stated he would keep his offer of a gold medal for the best essay on Zymotic diseases open for another year.

A telegram from Dr. Marsden was read.

Dr. C. C. HAMILTON, seconded by Dr. WADDELL, moved,—"That a committee be named as the nominating committee to report to-morrow,—Carried.

Dr. PARKER, seconded by Dr. C. C. HAMILTON, moved the following as the nominating committee:—

Nova Scotia—Drs. C. C. Hamilton, Wickwire, Farrell,

New Brunswick—Botsford, Waddell, Gove.

Quebec—Coté, Robillard, Tourgeon, Hingston, David.

Ontario—Hodder, McDonald, Wright, Grant, Caniff.

The Committee on credentials reported Dr. Fitch's certificates as satisfactory.

Dr. HINGSTON made a few remarks on Lithotomy vs. Lithotritry in connection with his paper read in the morning.

Drs. Botsford, Parker, Harding, Farrell, Waddell, Keator, C. C. Hamilton, Harding, Travers and Christie made observations on Dr. Hingston's paper.

Dr. HINGSTON replied.

Being 6 o'clock the meeting then adjourned.

EVENING SESSION.

The President assumed the chair at 8 o'clock.

The minutes of the afternoon session were read and approved.

Drs. LeBaron Botsford, junr., St. John; John Beryman, do; Malcolm O. McDonald, Cambridge; and L. P. Toecque, Oak Point, N.B., were elected ordinary members.

Dr. C. C. HAMILTON gave notice that he will move to-morrow morning a reconsideration of the decision in the report of the Committee on the By-laws.

Dr. HINGSTON resumed his reply to the arguments on his paper.

Drs. Hamilton, Earle, Travers, Keator and Parker made a few explanations in reply.

Dr. BOTSFORD next read a paper on Hygiene.

Dr. KEATOR, seconded by Dr. E. BAYARD, moved a vote of thanks to Dr. Botsford for his able paper.—Carried unanimously.

Drs. Parker, Keator, Grant, Hamilton and Bayard made remarks on Dr. Botsford's paper, when the meeting adjourned at 11 p.m.

2ND DAY.

7th August.

The President took the chair at a quarter past 10 a.m.

There were present Drs. Grant, C. C. Hamilton, Robillard, Botsford, Farrell, Black, Harding, Coté, Boisse, Tourgeon, Waddell, Thompson, Parker, Earle, G. A. Hamilton, Earle, jun., Hingston, Bayard, David and others.

The minutes of the evening session of yesterday were read and confirmed.

The nominating committee reported the following as the officers and committees for the ensuing year:

Dr. Marsden, of Quebec, as President; vice

president for Ontario, Dr. H. H. Wright, of Toronto; vice president for Quebec, Dr. Hingston, of Montreal; vice president for Nova Scotia, Dr. Jennings, of Halifax; vice president for New Brunswick, Dr. S. L. Earle, of St John; General Secretary, Dr. David, of Montreal; Treasurer, Dr. Robillard, of Montreal; Local secretary for Ontario, Dr. J. Fulton, of Toronto; local secretary for Quebec, Dr. A. G. Belleau, of Quebec; local secretary for Nova Scotia, Dr. J. F. Black, of Halifax; local secretary for New Brunswick, Dr. G. S. Keator, of St John.

Prize Essay Committee—Drs. David, Howard, Fenwick, Rottot and Peltier.

Committee on Medical Education—Drs. Grant, Howard, Bayard and Parker.

Committee on Medical Literature—Drs. R. S. Black, Dagenais, Larue, Fulton, Bethune, McIntosh, G. A. Hamilton, Fenwick, Oldright, Wickwire and R. H. Russel.

Committee on Necrology—Drs. F. W. Campbell, Caniff, W S Harding and DeWolfe.

Committee on Publication—Drs. David, Robillard, F W Campbell, Trenholme, Dagenais, Hingston and Peltier.

Auditing Committee—Drs. Peltier, Turgeon and Fenwick.

All of whom were unanimously elected.

Dr C C HAMILTON, seconded by Dr DAVID, moved,—“That the following gentlemen be requested to read papers at the next meeting on the following subjects:—

Dr R P Howard, of Montreal, on Medicine.

Drs Farrell, of Halifax, and Fenwick, of Montreal, on Surgery.

Dr E H Trenholme, of Montreal, on Midwifery.

Drs. A. P. Reid, of Halifax, and Brosseau, of Montreal, on Hygiene.

Drs. Desjardin, of Montreal, and Roseburgh, of Toronto, on Ophthalmology.

Dr. Berryman, of Toronto, and Dr. G. A. Hamilton, of St John, on New Remedies.

Dr. Hingston, of Montreal, on Mercury.

The Auditing Committee reported having examined the Treasurer's books and accounts from 15th September, 1870, and found them correct.

Drs. J. Brady, Andrews, Smith, and Christie were elected ordinary members.

Dr. HAMILTON brought up his motion to reconsider the report of the Committee on By-laws, and seconded by Dr. Farrell, moved,—“That it be reconsidered this morning,” which motion was lost.

Dr. HAMILTON moved that the newly elected officers now assume their offices,—which was lost.

Dr. BAYARD exhibited to the Association a young girl who had fractured the odontoid process some three years ago—this process having passed out through the throat and mouth—exhibiting it—explaining the cure, the treatment, and showing the instrument he had invented to keep the head in situation. The thanks of the Association were offered Dr. Bayard.

Dr. BOTSFORD, seconded by Dr. TRAVERS, moved,—“That a special committee be named on vital statistics which motion was carried, and the following gentlemen named as the committee, and requested to bring the subject before the Dominion Parliament:

Drs. Grant, Tupper, Botsford, Hamilton and Rottot.

Dr. HAMILTON, seconded by Dr. HARDING, moved,—“That the thanks of this Association be tendered to the different Railroad and Steamboat Companies for having reduced the fare to the members attending this meeting.”—Carried unanimously.

It was moved by Dr. PARKER, seconded by Dr. HINGSTON,—“That our warmest thanks be tendered to the members of the Association of New Brunswick for the unbounded hospitality and kindness shown the members from a distance attending this meeting.”—Carried unanimously.

Dr. HAMILTON, seconded by Dr. HARDING, moved the thanks of the Association to the Odd Fellows for the gratuitous use of their Hall.—Carried unanimously.

On motion a gratuity was voted to the janitoress.

Thanks were unanimously passed to the retiring officers.

It was moved by Dr. BOTSFORD, seconded by Dr. C. C. HAMILTON,—“That the next meeting of the Association be held in Niagara.”

Dr. PARKER, on behalf of his confreres of Halifax, invited the Association to meet in that city, but Dr. Botsford's motion was unanimously carried.

Dr. PARKER, seconded by Dr. EARLE, moved,—“That the next meeting to be held at Niagara be held on the 1st Wednesday in August, 1871.”—Carried.

After some remarks from Dr. Parker,

It was moved by Dr. HAMILTON, seconded by Dr. BOTSFORD,—“That the sum of \$100 be given the Secretary for his services for the year.”—Carried unanimously.

Moved by Dr. BOTSFORD, seconded by Dr. BAYARD,—“That the treasurer be paid his travelling expenses.”—Carried unanimously.

On motion it was resolved that Dr. Grant, the retiring president, be authorized to name a committee of arrangements for the next meeting.

Dr. Grant being requested left the chair, and Dr. Hingston called to it, when Dr. Bayard, seconded by Dr. Parker, moved a vote of thanks to Dr. Grant for his able conduct while in the chair.—Carried unanimously.

Dr. GRANT returned thanks, and the meeting adjourned.

THE MEETING WAS CONCLUDED BY AN ELEGANT LUNCHEON,

which was served up in a spacious and beautiful chamber in one of the wings of the Lunatic Asylum building was one of the most agreeable re-unions ever held in this part of Canada. It was given by the members of the Medical profession here to their visiting professional brethren from the other provinces and other guests, and was graced by a large attendance of the ladies of the party and of the city and suburbs. A special train was provided for the party at one o'clock, and for nearly an hour the company enjoyed the fine scenery of one of our most picturesque spots, listened to the strains of the band lately connected with the 62nd Battalion, joined in social chit-chat or otherwise amused themselves. At the appointed hour, there was a lively rush to the luncheon room, whose handsomely arranged and richly covered tables presented a sight which not even the most sublime philosopher or the most angelic creature of any sphere or sex could afford to despise. The party being seated, Dr. Steeves, Vice President of the New Brunswick Association, took the chair, supported on the right and left by His Honor the Lieut. Governor, Dr. Grant, M.P., Hon. Edward Willis, the Mayor, Drs. Davis and Hingston, and John Boyd, Esq. and others. Among the other guests were J. Edmond Barbeau, Montreal, the High Sheriff, besides editors of the morning and evening papers and others. Drs. Botsford, Waddell and Travers occupied the vice-chairs.

The Chairman said that as he supposed the company would rather address themselves to the "solids and liquids" before them, than be addressed at length, he had his speech printed to save trouble. There it was, pointing to the word *Welcome*, printed in evergreens. (Cheers.)

Grace having been said by the Rev. D. Scovil, the onset on the first-class luncheon provided was commenced, and prosecuted with vigor. It, however, successfully resisted the attack until a late hour in the afternoon.

In due time the usual loyal toasts were proposed, including those of the Queen, the Governor General, and the Lieut. Governor and his Council.

The last mentioned toast was proposed by Dr. Waddell, who remarked that the Governor was Attorney General when he was appointed superintendent, and the institution had ever been warmly supported by the Government. (Cheers.)

The Governor made one of his most telling speeches, narrating humourously the narrow escape

he had from the medical profession because he could not speak well (laughter), and from curing or killing great numbers, (laughter.) He seemed to think that imagination had a good deal to do with the effect of medicine, and gave a humorous illustration of a very harmless kind of pill, which a lady had used with the happiest results. He then branched out into a grand stirring national speech, which delighted every one, in the course of which he paid an eloquent and just tribute to the medical profession. He gave the health of Dr. Grant, President of the Canada Medical Association.

Dr. Grant, who is a fine speaker, and distinguished in many ways, spoke of the gratification he had in visiting this fine mercantile emporium, with its magnificent harbor, and social and intelligent people. He spoke of the growth of the association, and said they never had enjoyed a more cordial reception than in St. John. He hoped the Maritime Physicians would accept a return in Ottawa. (cheers.) He concluded by expressing his best wishes for St. John, and asking to hear from Dr. Botsford, [cheers].

Dr. Botsford responded, and proposed "Our Visiting Brethren," selecting Dr. Hingston as his victim, and designating him as a rather confirmed bachelor.

Dr. Hingston made a most amusing rejoinder. He said he would not make a state speech, for in that case they would know it was prepared before hand, or perhaps already sent to press like the Governor's and Dr. Grant's (great laughter). After convulsing the company for some time, and declaring that he had nearly succumbed to the influence of our fair ones, he retaliated on Dr. Botsford, being wickedly prompted thereto by a slip of blue paper, (which seemed to have come up from Dr. Travers,) stating that when he glided into matrimony, he intended to follow Dr. Botsford's example in *every particular*. (This sally created roars of laughter, in which none joined more heartily than Dr. Botsford unless it were the ladies.)

Doctors Robillard, David (Secretary), Wickwire and Hamilton, who were called out in various ways, made speeches in the same happy strain; but the most amusing speech of the day was made, as a matter of course, by John Boyd, Esq., who was called out by Coroner Earle. It would be quite impossible to report or translate Mr. Boyd's amusing delineations of men and things, including the views which different characters had of what constituted great cities.

Various other toasts followed, and about four o'clock the party broke up, and returned by special train to St. John.

BIRTHS.

At New Lancaster, on the 2nd inst., the wife of Andrew Harkness, M.D., C.M., of a daughter.

DIED.

At Aylmer, Quebec, Sept. 1st, 1873, of typhoid fever, Charles Howard Church, aged 35 years, late Coroner for the District of Ottawa.

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Original Communications.

Address in Surgery. Delivered before the Canadian Medical Association in St. John, N.B., August 6th, 1873. By WILLIAM H. HINGSTON, M.D., L.R.C.S., Edin., Surgeon to St. Patrick's Department, Hotel Dieu, Montreal.

While thanking you for the honourable position your partiality has assigned to me, I am fully sensible of the difficulty of dealing, in a satisfactory manner, with so important a subject as Surgery; and especially of giving an *aperçu* of its condition, its status, in this extensive but thinly populated territory.

Since the organization of this important Association, destined, let us hope, to cement into one body the members of our profession scattered throughout this vast Dominion—the addresses have been confined to those delivered annually by the retiring President, and on such general subjects as fitted the occasion. It was resolved last year to inaugurate at this, the seventh annual meeting, addresses in Medicine, Surgery, Midwifery, and Hygiene, and, speaking in the interests of this Association, I cannot but regret that to some other had not been confided the first address in that branch of the healing art which pertains to external therapeutics—the *quod in therapeia mecanicum*.

The fact that, in this Canada of ours, partially rescued, as it were, but yesterday, from the primeval forest, and its lordly master the red man, an association of this character should have been formed, is, in itself, an indication of a progress which has no parallel save in the adjoining republic:—and the circumstance of a division into the various departments which make up the general science of medicine as a whole, is an indication of the advanced condition of each. But a few years ago, and in the place where we are now assembled, the *Medicine* or *Mystery* man, the Maskiki inini, sought, by incantations and other devices, to relieve the distressed in body of their sufferings. And even now, near where villages dot the surface, and towns and cities usurp the primeval forest, charms and amulets, and the potent mystery bag, are, despite the laugh of the white man, used to ward off the ills and perils of life.

The history of Surgery in this Dominion is the history of its civilization. When Jacques Cartier dropped anchor at the foot of Hochelaga, (at a period when Polypharmacy drenched its victims with its multifarious combinations,) and when his fellow countryman, Ambroise Paré, made known *au très*

Chrestien Roi de France et de Pologne the boldness of his surgical skill, the Aborigines also had their Doctors and conjurors who were valued as dignitaries in the tribe “the greatest respect was paid to them by the whole community, not only for their skill in their materia medica, but more especially for their tact in magic and mysteries.” “In all tribes their doctors were conjurors, ‘magicians,’ ‘soothsayers,’ ‘high priests.’ They superintended and conducted all ceremonies.” “In all councils of war and peace they had a seat with the chiefs; were regularly consulted before any public step was taken; and the greatest deference and respect were paid to their opinions.”* It is meet, Mr. President and Gentlemen; that in this, the first address in Surgery before the representatives of the profession in this Dominion, I should say a few words of that singular class of men now fast passing away, our *devanciers* in the healing art on this Continent, and however much may have been achieved in that art since then, we, their *remplaçants* must admit, that with less mystery, and with better claims to regard, we receive not always so considerable a degree of influence and consideration. But waving wheat fields take the place of forests; the red man wends steadily and fatally to the setting sun; and our forefathers of European origin usurp their places. New arts are substituted for the old—and mystery bags and their appendages, the “toes and tails of birds, hoofs of deer, goat and antelope, and the tails and tips of almost everything that swims, flies or runs,” to make great medicine, give place to a somewhat rude surgery, and to a crude and ill digested materia medica. It is interesting to trace the rise and progress of surgical science in Arabia and Egypt, and its gradual extension to the West, where, in our day, it has attained an elaborateness—a refinement—little dreamed of by our forefathers. It is no less interesting to note the rise and advance of the healing art on this Continent. Without much effort of imagination we may fancy the Indian youth preparing himself for the practice of the art, wandering from his father's lodge to some secluded spot, fasting for several days, and, with his face to the earth, praying to the Gitche Manitou—the Great Spirit, to designate to him in his dreams the beast, bird or reptile He has destined to be his mysterious protector through life, and his conductor to those fair hunting grounds in the kingdom of Ponemah—the Land of the Hereafter. The dream is, no doubt, sometimes proportionate to the valour or ambition of the dreamer,—and the black bear or

* Catlin.

panther is trapped or slain by the young brave to form *great* medicine, while the more timorous supplements his dream with racoon, porcupine, weasel or civet.

The Aborigines had their surgery—simple but effective—to which even their usurpers were sometimes forced to have recourse. Contused wounds and bruises were treated by cold douches from springs and running streams; and suppurating wounds with the bark of the mucilaginous slippery elm (*Ulmus flava*) and bass wood (*Silia*) and the resinous bark of the Tamarac (*Larix americana*); all excellent emollient and stimulant cataplasms; and ulcers were stimulated to granulation by the inner wood and berry of the Juniper (genus *juniperus*).—They reduced dislocations by main force, and also, it would appear, by a rotatory method, which seemed somewhat like that introduced to the profession by that distinguished American surgeon Nathan Smith. Fractures (which rarely occurred among them,) were carefully set, and splints of cedar or broom, ingeniously padded by the squaws, with leaves or grass, were bound upon the limb with withes of the young birch, (genus *Batula*); and amputations were performed at the joints with knives of flint or jasper (and in some places of copper) polished and keen as steel*—the spouting vessels were seared, and hæmorrhage arrested, with stones heated to redness. Those practices are still continued among the tribes far removed in the interior.

With, or soon after the advent of the white man, and his higher wants, his higher civilization, and his diseases of a commensurate complexity and intricacy, came the Medicine White-man, the Te ho pee nee wash ee of the West, or the Maskiki inini of the north, who fraternized not with his red confrère—upsetting the old adage “*similis similibus gaudet*,” It may not be generally known that the members of the legal fraternity were not allowed, while the French were yet masters, to reside in Canada, and practice their profession; the reason assigned being, say the chronicles of the time, experience had taught they had sowed trouble wherever they went (ils semaient le trouble partout ou ils allaient.) Canada during French domination, realized, in this respect, the day-dream of Sir Thomas More, who excluded lawyers from his Utopia. (By way of parenthesis it may be observed, those who now enjoy the *quiet* luxury of their presence will admit that the disciples of Justinian have much improved since then.) The first mention of a surgeon destined for Can-

ada is in 1640, when M. Maisonneuve, obliged by a storm, which endangered his vessel, to put back to France, three or four persons deserted him, among whom was “*Celui qui lui etait le plus necessaire de tous, le chirurgien.*” Admiral Courpon, however, who had preceded him, and who had arrived at Tadousac, was told of the mishap, especially in the loss of the surgeon, whose services would have been indispensable in the formation of the new establishment, which could not, Maisonneuve observed, be effected without the effusion of blood. DeCourpon generously offered his own surgeon, and the latter, apprised of the urgent need of him, had his chest lowered at once into Maisonneuve's boat, and cheerfully followed. What his name was, is not stated. The first mention of a commission to teach surgery was in 1658 when Jean Madry obtained, from Sieur Francois Banroin, first surgeon in ordinary to the King, and Provost of the Royal College of St. Côme, in the University of Paris, not only letters of “*surgeon*” for himself, but also the power to establish, in Canada, the mastership of surgery in all the towns and villages, in order, said the edict of the time, “*dans leur besoins, les passants et les habitants puissent être mieux et surement servis, pansés et medicamentés.*” But these letters patent, though registered, became dead letters. The first student in Medicine, and the only one of that time, was Paul Prudhomme, brother-in-law of Madry, who, for the space of three and a half years, so the document says, was to be taught “*son art de Chirurgien et tout ce dont ils' occupait et entremettait dans cette profession de Chirurgie, Medicine et Pharmacie.*” The earliest practitioners were all called surgeons—the term physician or *medecin* was not used by the early settlers. Surgery, therefore, had precedence in this colony over Medicine, as both had precedence, in point of time, over law; and whilst practitioners treated diseases, prepared medicaments, and operated on the wounded, in all the early public acts they were called surgeons, and were qualified by that title; and on the vessels the name of surgeon was given to the officer of health who accompanied. The reason given was this: that in a country where the whites were exposed incessantly to the attacks of the natives, in which nearly all the first colonists were destroyed by them, the art of surgery was, as the documents state, “*d'une nécessité plus pressante, et d'un usage plus frequent.*” For twenty years thereafter, there were but five (5) surgeons in what is now the largest city in the Dominion; their names are given, and a writer of that period wonders how so many could have subsisted. But to prevent any possibility of interfering with each other's inter-

* The preparation of these instruments was often times the work of years

ests, (would that their successors had continued to be as scrupulous!) they threw their whole earnings into one common fund, and, by a contract of association, their books, furniture, food, merchandise, furs, and the fruits of the earth, instruments of surgery, medicines, and their whole revenue; and also contracted that none of them should go into debt for a greater sum than five coppers, and that, only in case of urgent need. At the end of four years their books were balanced and each one received an equal share. It was also stipulated that if either of them died before the expiration of the term, all his interests belonged to the survivors. Those men, and their early successors have passed away, and so arduous was then the struggle for existence, they have left no written record. Pale faced women from old France exercised the healing art more than two hundred and fifteen years ago, when Nova Scotia, New Brunswick, and Ontario were unexplored wildernesses. At two spots—Montreal and Quebec—were they to be found, screened by palisades from the Iroquois—warding off their encroachments with the one hand, and with the other, by kindness giving evidence of their love of Him who healeth our diseases and redeemeth our life from destruction.

The science and art of surgery have been so steadily progressing since then, that I know not what most to draw attention to, in the few remarks time will permit me to make. The field over which my thoughts have wandered, in making a selection, is vast and varied. It embraces the accumulation of many thousand years of patient toil, each country—even our own—adding something to the general store, till it approaches a precision, and a definiteness, a completeness, not yet—perhaps never to be attained, by her handmaid medicine. Knowing well I speak in the presence of men, older, wiser and better instructed than I am, I shall limit myself to a few, a very few subjects of general interest—subjects concerning which, somewhat favored circumstances enable me to speak with a moderate degree of confidence, *avec connaissance de cause*. And in doing this I shall go but little beyond, and in most instances keep within the period that has elapsed since the organization of this Society in Quebec, eight years ago.

Since that organization chiefly, the views regarding inflammation have undergone modification, and most important advances have been made in the treatment of inflammations generally, and of the inflammatory fevers consequent on traumatic injuries and surgical operations. A word or two will explain this position. If a man of health be rated at par—to

use a commercial phrase—the maimed, the injured should not, ought not to be considered as above that desirable condition, to be reduced to, or below it. Far otherwise is the treatment generally to be followed, and many surgeons now seek to raise rather than to depress, the already weakened vital powers, by nutritive food, tonics, and if need be, by stimulants, and in some cases, by the transfusion of blood. The antiphlogistic treatment of inflammation bids fair to be soon consigned to its last resting place, and I shall be happy, if, with my feeble voice, I am permitted to aid in singing its *requiem*. The early local employment, by the Prussians, in the recent Franco-German war, of warm water instead of cold, is a recognition of that principle, and of the necessity of avoiding any depressing agency. Experience taught them that in bruises, wounds, ulcers, fractures, &c., warmth was far more grateful to the sufferer, and patients did better under its early use.

Almost coeval with the existence of this Society, the means of arresting hæmorrhage attracted renewed attention from Sir James Simpson's efforts to substitute Acupressure for the ligature, which, since its introduction by Ambroise Paré, in the 16th century, held supreme sway. In the large hospitals of Europe and America, its use is become more and more general. Surgeons are now desirous of closing arteries so effectually as to check any hæmorrhage, (which ligature certainly does,) yet leave no foreign substance attached to, or semi-detached from, the living vessel; to leave no sloughing or suppurating wound to wash away a dead piece of artery and the now useless ligature itself. Thiéry, Amussat and Velpeau endeavoured to accomplish by Torsion, and Simpson by Acupressure, what Fleet-Speer has accomplished by the Artery Constrictor—a method which seems to possess many of the advantages of acupressure, and none of the disadvantages of ligature. While each of these methods has special advantages in certain cases, the time, I believe, is not far distant, when the ligature will be laid aside by others—as it has long since been by myself. The temporary employment, in anæmic subjects of acupressure before or during an operation likely to be accompanied by much hæmorrhage, is an expedient of value—preferable to the aneurism needle—and is quicker and safer of application.

Anæsthetics.—More important still than the question of hæmorrhage is that of *anæsthesia*—and one which is now attracting much notice. We, in Canada, follow the practice of the British in the use of chloroform in preference to the safer anæsthetic—Ether. The circumstance that the number of deaths from chloroform is greater than for-

merly, amounting to upwards of a dozen published cases a year in England alone, apart from a much larger number of *un*-published ones, has created well founded alarm, and the favourite anæsthetic of our neighbours, with the bichloride of methyl, are attracting a large share of attention. The mortality returns published by Dr. Morgan show that we are using the most hazardous of all the anæsthetics:

1 death to 23,204	administration of ether.
1 " to 5,588	" of ether and chloroform.
1 death to 5,000	" bichloride of methyl.
1 death to 2,873	" chloroform.

The chief objection urged against ether—the length of time required to induce insensibility—is not tenable, as ether properly administered will induce complete anæsthesia in as short a time as chloroform, though the struggles during its administration may be greater. Our experience of the bichloride of methyl is yet too limited to warrant any general remarks.

Fractures.—The comfort of patients has been greatly added to by the treatment of fractures generally, by extension with weights and pulleys, without pads, without bandages or rollers, without splints of wood, gypsum, starch or glue. Thanks are chiefly due to an American surgeon (Gordon Buck) for this vast improvement.

Dislocations.—To another American surgeon, Nathan Smith, is due the credit of the ready method of reducing dislocation by the surgeon's unaided efforts; and traction with pulleys is now rarely resorted to.

Skin Grafting.—Large surfaces of denuded integument are now covered by healthy skin taken from another part of the body, or from the body of another, and grafted in small pieces on the raw surface. So important is this method of Reverdin, that I quite agree with Morton in styling it "one of the greatest surgical advances, if not the greatest, of the present age."

Electrolysis.—Though this is the age of bold and daring surgery, there are places where even the boldest and most daring dare not enter his knife. Here the surgical chemist comes to his relief. Electrolysis has become so important an adjunct to the armamentaria of the surgeon as to induce an American writer to style it, from its perfect manageability, the king of Caustics (he meant the President no doubt). Where extensive tumours are to be removed, without the loss of blood, in patients of feeble health; where dis-

figurements would follow the use of the knife; and where local and general irritation are to be avoided, *a tout prix*, electrolysis, by means of the *positive* as well as, the negative *electrode* with needles of zinc or platinum, has, in the hands of Stroh, of Olmutz, in Austria, and of Althaus, in London, and of others, been most serviceable. It does seem a fanciful proceeding to introduce needles into a solid mass, however large, and in situations, however deep, and with a prolonged and feeble current, without chloroform or ether, or, with a powerful stream with anæsthesia, to dissipate it into thin air (hydrogen) leaving scarcely "a wreck behind" of shrunken, grey or brownish tissue, harmless, innocent, innocuous. Nævus, lupus, sarcoma, cancer have, in these ways, been made to disappear. And intelligence reaches us from Italy, France, Great Britain, and the United States, of the apparently successful employment of electrolysis (under the name of galvano puncture) in aortic and other aneurisms. Ciniselli mentions, in "Il Galvani," having treated five cases, in three years, of thoracic aneurism alone. Granting, however, to electrolysis, much that is claimed for it, it can never take the place of the knife; but there are cases occasionally met with where the knife is inadmissible, and where the method of Groh and of Althaus, judiciously employed, has attained a success to dissipate the smile of incredulity with which their method was first received by the profession.

Galvanic Caution.—As a corollary, the galvanic cantery, as recently introduced by Marshall, is another weapon in our hands for warring against peccant disease, and, like the invention of Chassaignac (over which it has no advantage,) is a safe instrument to be used by the timid, who prefer the sere dry edges of a wound, to the trouble of looking for, and the risk of not easily finding and securing, the divided vessels.

L'Aspirateur.—The last general method I shall notice is the aspirating syringe and exploring needle, destined to be of much advantage to surgery—though not, as some claim, invariably without danger. While on the one hand it has been repeatedly used, and with advantage, in distended bladder and strangulated hernia, in empyema and in purulent peritonitis, without untoward symptoms, its use has been followed by death in at least one instance, where, *a priori*, no danger would seem to be reasonably apprehended. Cysts, anywhere and everywhere, are treated with it, and whether as an aid to diagnosis or to treatment, abscesses of the liver, periodic effusions, and dropsical swellings of the joints, are dealt satisfactorily with by this pneumatic method.

Carbolic Acid.—Before passing to special subjects I have merely to observe that carbolic acid has now fairly taken its place in surgery. It is needless, therefore, to criticise its claim. It has been enthusiastically adopted by some, and as sternly rejected by others; but a little less enthusiasm on the one side, and of obstinacy on the other, and carbolic acid settles down into its appropriate niche of usefulness—not, in killing germs, hatched by enthusiasts for the nonce that they *might* be killed, but in diminishing suppuration and in opposing septicaemia.

Passing to the domain of Special Surgery I shall have time but to allude to the vast strides made in Ophthalmology. Entropion and Ectropion, (those troublesome diseases which hitherto resisted all efforts at permanent alleviation) are now managed by Schnell and others differently, and with lasting success. Obstructions of the duct are treated by a new method which preserves the patency of the natural channel. The classic operation of Weber no longer holds empire and sway—but has given place to Von Graeffe's and Liebreich's.

The ear, which some aurists taught us to respect so far as to advise us not to permit the introduction to the tympanum of an instrument smaller or sharper than the elbow, and that, the elbow of the owner of the ear, now tolerates, not only punctures of the membrane of the tympanum, but tenotomy of its tensor near the malleus—or of myotomy in its course—an operation which, early and judiciously performed, will often relieve suffering, and preserve the integrity of the whole organ.

Paracentesis of the membrane of the tympanum, and the use of the air douche in purulent inflammation, or catarrhal or hæmorrhagic effusions, may not always preserve hearing, but may and does sometimes preserve life, when disease is spreading to more vital parts. Those who dread to approach the ear in that way, may learn to pass a small catheter through the entire length of the Eustachian tube from the pharynx to the anterior wall of the tympanum.

A practical suggestion *en passant*. Might not the deafness which has so frequently occurred in some parts of Canada in the course of the epidemic of cerebro-spinal meningitis, be sometimes prevented by timely paracentesis? Unheard of liberties are now taken with the nose. In addition to Thudicums' method of treating that opprobrium medicum, ozæna—which is being transferred from the domain of medicine to that of surgery—the mucous membrane of the gingivolabial furrow is divided with the frænum, the cartilaginous,

septum to nasal spine, and the nasal cartilages too, if necessary, the nose turned up, and the necrosed bone, giving rise to the odour, removed, and the parts brought into apposition. Primary union without deformity takes place, and the cure is complete!

So long as we keep to the outer man we are safe; but should groping for disease carry us within the patient's mouth, we are in the domain of the *oral* surgeon, ! save the mark ! The oculist and aurist, with great advantage to science and humanity, take charge of the organs of the special senses of sight and hearing, and the field for either is sufficient to satisfy the desire of intelligent ambition. The dentist, now styled doctor of dental surgery, looked after our teeth, and well satisfied are we when his operations are confined to their inspection. But now the buccal cavity is claimed as the fishing-pond of the oral surgeon. Pardon me—the Doctor of Oral Surgery—D.O.S. ! Happy thought ! and happier title !! Oral surgery carries the science from the top of the mouth above, past, and including, all the teeth, incisors, canines, bicuspid and molars ; past the uvula, past the fauces and anterior palatine arch ; past the right, aye, and the left tonsil ; past the posterior palatine arch to the epiglottis, catching up in its way the apertures of the various salivary ducts, and there leaves it. But it cannot, in this age of unrest, stop there. There is room, and capitals to furnish titles to, the laryngeal, the tracheal, the clavicular, the sternal, the costal, the inter costal, the axillary surgeon, the humeral, the parietal, the genital, the inguinal, the femoral, the popliteal, the pedal, the phalangeal surgeon ; but, here again, we encroach on the *terrain* of the comfort-giving corn doctor, the Chiropedist, to whom I should suggest the appropriation of the title of D. C. S., Doctor of Chiropedal Surgery ! And why not ? A toe is as good as a tooth, and there are fewer of them.*

Resigning the teeth to that excellent body of men—the dentists—and retaining the rest of the oral apparatus as the domain of the educated surgeon, by one of whom the most brilliant achievements of modern surgery has been effected in this department—Langenbeck's urano plastic operation—peeling off the periosteum and fibro-mucous membrane from its

*It must not be supposed I aim a shaft at those who, with proficient knowledge in almost every department of our art, exhibit, by accident or otherwise, a predilection for certain departments of it. The educated surgeon is at liberty to select (and it is an advantage to the profession generally he should select) when and where he pleases. But a knowledge of the *whole* is an essential preparative to the successful study of a *part*.

bed, to close, with bone forming periosteum and fibro mucous membrane, apertures that nature, in her caprice, had left open; and yet maintain connection with surrounding living structures.

In the domain of bold and daring surgery is the recent operation—exceptionally dangerous in its character—removal or partial removal of bronchocele by the knife—thyrotomy, as it might be called—an operation, according to Greene, of Maine, warrantable only when a “certainty of death stands opposed to a possible chance of safety by operative procedure, giving the patient the chance, no matter how small it is, provided he or she make the choice, with a full understanding of the facts, and with no prompting by the surgeon,”—performed only about a dozen of times altogether, two-thirds of that number in the United States, and half of the remaining third, in part, by two distinguished members of this association, and without fatal consequences.

Early thoracentesis in pleural effusions occurring in the course of scarlatina, is now generally practised; and purulent collections are drawn off by an aspirating syringe.

Tapping the bladder with the fine tube of an aspirating syringe, in cases of retention of urine—in the opinion of M. L'Abbé, “a perfectly harmless operation, rarely followed by local tenderness or cystitis,” which though it addresses itself to a symptom and not to a disease, diminishes the impermeability of the stricture and permits the easier passage of a catheter—an operation so easy as to induce M. Dieulafoy to assert that it is “painless, innocent, easy of execution and certain in result, requiring no special surgical knowledge or ability, and within the reach of all.”

To obviate the necessity of resorting to this “painless,” “innocent,” and “certain” method, an American surgeon of eminence has introduced the vertebrated catheter (here exhibited) which, to read the description given, has a special affinity to natural passages. Between all these methods, and the old-fashioned cat gut, and the *coup sur coup* dilatation, and the forcible catheterism of Bitot, by a steel catheter of large size with a deep groove and an olive-shaped head, if the subject of stricture now permits a fatal blocking up of the water conduit—he should, as Sir Boyle Roach would say, be indited for it.

Passing to the other emunctory, the rectum also permits liberties not hitherto supposed susceptible of, in being so dilatable that all the fingers and the thumb, and even the whole hand (if not more than 9½ inches) may be introduced within its cavity,

there to explore it, the bladder, and, in the female, the uterus and ovaries. In stricture, in cases where dilatation is of no avail, the division of the bowel in its entire thickness (including the sphincter) in the median dorsal line, is one of those eminently practical proceedings that one wonders it should so recently be introduced to the notice of the profession. Yet is it a safe and simple procedure, free from dangerous hæmorrhage and from risk of wounding the peritoneum; and vastly preferable to the tedious and difficult operation of M. Verneuil—external rectotomy.

A few words more and I have done, much as I could desire treating of the surgery of the lower extremities, for which there is no time. What vast strides have been made in the higher Gynæcological surgery—the highest—the noblest department of our art, inasmuch as it deals with organs and functions additional to those common to both sexes. The censure which, a few years ago, was heaped upon the surgeon who had the boldness to attempt the removal of an ovarian tumor, would now, with greater justice, be meted to him who had not the courage to attempt it. From occasional success, the percentage of recoveries in Great Britain has steadily increased till the present, when four out of five operations, in well selected cases, terminate favourably. On the continent of Europe the ill success that for a long time seemed to attend ovariectomy is now being improved. When in Vienna, in 1867, I was present at the eighth operation of the kind performed at the Krankenhaus—all of which had terminated fatally. But the success of Kæberle and others almost equals that of Keith and Wells; and like that of those gentlemen, is steadily improving. In 1871, there were sixteen recoveries out of every twenty-two; and in 1872, seventeen out of twenty-one; the number of failures diminishing from one-fourth to one-fifth. As an evidence of the interest now being taken in this department, no less than twenty-six papers have been published within the past six months, of upwards of 130 cases of complete ovariectomy, all presenting features of interest; but the method of removal which seems the most novel is that by enucleation, practised in some instances in the United States, without clamp, ligature, cæseur or galvanic wire. But not diseased ovaries alone are removable with the knife, but from the womb its *lf*, man's first resting-place from conception till birth; from its substance or its cavity, (the interior of which can now be explored as easily as the vagina itself,) are removed growths *qui peuvent nuire*. The removal of the whole organ has been frequently practised with

success; and Mons. Péan claims for hysterotomy—partial or entire—a place among the regular operations of surgery. Even the gravid uterus, as it does not escape the inroads of disease, does not escape the knife; and in the early months of pregnancy the diseased os has been excised, and the patient has gone on till the full term of gestation.

I have not the courage, Mr. President and gentlemen, to detain you longer. While the science of surgery has undergone some changes, and the art has been advanced, simplified, improved, I must needs be content to lift a mere corner of the veil to obtain an imperfect glance at the more recent important changes—changes so recent as not yet to be embodied in works on systematic surgery.

And what share has Canada in advancing surgical science? Canada would seem to be a crucible in which German, French and British science is reduced to practical value, and made to serve as a foundation for our art. We, less deeply learned, less philosophical than the first, appropriate, and know how much, and how far, safely to appropriate those seeming truths, a knowledge of which had been acquired by patient methodical study, which, in our altered circumstances we are not yet able to conduct for ourselves. Less scientific than the second, less deeply versed in those laws they interpret so well, the immutability of which is the basis of all science, yet withal less speculative. With less leisure than the last to acquire knowledge *for its own sake*, we have time to seek only for its practical application, for it would appear that we, like Cato of old, estimate everything by what it produces. Even liberal knowledge with us is made to become *useful* knowledge; is exalted into *scientific* excellence, looks for a result beyond itself, thence glides into an art, and is made to terminate in tangible fruit. In a word, we leave science not much higher than we receive it, but we leave art certainly no lower. And while most, if not all the achievements attained by means of manual dexterity and correct anatomical knowledge by our transatlantic brethren, have their counterpart here, the general laws on which are based certain principles and relations are, perhaps, less commonly understood. But this need not be matter of wonder. Separated from the busy teeming world of intellect, and placed where the struggle against external influences, like Darwin's animal creation, is keen and life long, if then, in this infant colony, we have not advanced the healing art, we have in no wise retarded it. The denizens of Paris, London, Vienna, have no adequate idea of the toil and fatigue endured by the early pioneers of this country, who sought to bring, to

the maimed and the wounded, the comforts of surgical aid. With what rude implements were fractures set, dislocations reduced, and limbs removed. With, in country districts, forty or fifty miles intervening between surgeon and patient, representing almost as many hours of painful travel, those were not the days of conservative surgery, and many a person has hobbled about for the rest of his life on the dried trunk of a young sapling, whose leg would now, in any town or village in Canada, be preserved to him. The experience of old Nathan Smith is that of most men who have seen something of country life, where a goose quill has been improvised as a female catheter, and where amputation has more than once been neatly and quickly performed with the axe or adze, or chisel and mallet, for toes and fingers; and for the arm or leg, a jack-knife for the soft parts, and a wood saw for the bone. Let us not censure the surgeons of that period for their rough but well-meaning attempts. They were necessary, and suited to the circumstances in which they were placed.

Eighty-two years, Canada at the time a wilderness, with here and there a village, there existed not a medical training school on this vast continent. Now they are met with in every State of the adjoining Union; and in this Dominion alone there are something like a dozen, each vying with the other in claiming to advance the status of the profession. Every district has its well educated practitioners, some, indeed, of marked ability, while the large towns as Quebec, Toronto, Halifax, Kingston, St. John, Hamilton, Chatham, have hospitals with efficient staffs. Montreal has two, and numerous dispensaries, besides her three medical schools, and were a stranger to visit either hospital, both of which private charity has reared, he would see nothing in the appointments to remind him he was not in the famed *Krankenhaus* of Paris or Vienna. The strides in material prosperity have been almost unprecedented in this Dominion, and the progress in surgery and medicine has been coeval, the best illustration of which is the circumstance that each has its special follower; and while practitioners in the first division are content to be imitators of their transatlantic brethren, some (*quorum parva pars sum*) are so bold as to believe that operations, even the most hazardous, are here performed with a dexterity, a *sang froid*, not inferior to what are witnessed in more favored Europe, and with a success, with modesty be it said, quite equal.

I have been almost tempted to place, and group in relief, certain features of surgical interest which Canada has had some small share in forming and in

moulding. But the too immediate contact with those events and characters indispose me to treat of a subject which might lead me unwittingly to magnify, with undue importance, what is recent, and of the surface, and, perhaps, to belittle certain features which may not now be prominent, but which time will develop into more lasting lineaments of interest and usefulness. Some future medical artist, no doubt, will furnish the sketch, when the glance will be a retrospective one, at those now quick with life who will then be insensible to censure or to praise.

But one word of the present and I have done.

Do we not share fully in that tendency of the day, to regard surgery in its anatomical, rather than in its pathological aspect—to grope with the knife, and to follow disease into deep and almost inaccessible structures, till it can scarcely be distinguished from the normal tissue around it, rather than to look, in the seemingly healthy body itself, for the source of the abnormality. From the nascent school of pathology, or rather pathological physiology, and from the possession of a higher general knowledge, better things may be expected, when surgery will not be a theatre for daring or desperate expedients, and when MacBeth's frenzied boast: "What man dare I dare" * sublime courage in a soldier other than he,—cowardly and criminal in a surgeon—considering the armed condition of the one—the utter helplessness of the other—will find no one to re-echo it—no one to admire.

Although I believe with a distinguished writer, that "knowledge is one thing, virtue another—that good sense is not conscience, refinement is not humility," yet knowledge the most liberal, refinement the most cultivated, are not the less essential to one who aspires to be the intelligent instrument of Him who guideth our hand: and although our institutions may have neither the prestige nor the status of those of favoured Europe, yet the advances in education have been such that aspirants to professional honours may now easily and inexpensively obtain that liberal knowledge which should be acquired for its own sake—that knowledge which is a whole, and of which the separate sciences are merely parts—that liberal knowledge which is necessary to fit one for the proper study of any of the professions, and especially that of the healing art—that knowledge which "stands on its own pretensions, is independent of sequel, expects

no complement, refuses to be informed as it were by any end, or absorbed into any art, though it may be followed by the cultivation of any. When this general knowledge shall have become the basis of professional knowledge—this liberal education (as distinguished from useful), the necessary ground work of, the preface to, scientific education, then, and only then, will Surgery with her handmaid medicine, attain a true position, as intellectual in its nature as it is heavenly in its aim, affording as a science and as an art, fullscope for the highest, the noblest, the most diversified powers of the mind. Methinks, without the wish or the power to prophesy, should the next seven years add as much to the storehouse of general knowledge, as the seven which have elapsed since the formation of this society have added to the stock of special or professional—something of which I have ventured hurriedly to pencil—the sufferers, and those who unceasingly endeavor to bring relief to them, will be equal gainers; and may those who now so kindly listen to me, and him who speaks, if still among the quick, be there to see.

Morbus Coxarius. By JAMES PERRIGO, A.M., M.D., M.R.C.S., England. Demonstrator of Anatomy, University of Bishop's College.

Whether we consider this disease in relation to its insidious nature, its frequency, or its serious consequences to limb and even to life, it must always be classed among the most important in the whole catalogue of surgical diseases. I say surgical, advisedly, and at the outset, for, from what I have observed and read, I unhesitatingly place it in that class, and shall deal with it in this imperfect essay as being strictly within the domain of surgery.

Hip-joint disease, the most general term for this affection, occurs at almost any age and in conditions of persons, though most commonly in childhood or early adolescence. There are certain gouty or rheumatic diseases of the joint occurring at a later period of life, all classed under the name of morbus coxae senilis, but this does not come within the scope of my paper.

I shall not touch on the anatomy of the joint, further than to say, it is generally acknowledged that anatomists have as yet been unable to demonstrate the office of the ligamentum teres, and they generally suppose it serves the purpose of supporting the vessels that supply the joint. I allude this

*Words used recently by a writer in describing me *judice*, a rash and useless operation.

much to the anatomy as it is usually supposed the disease begins in the ligamentum teres.

The hip-joint is the most important one in the human frame, and anything abnormal with it affects locomotion at once. It is liable to a variety of diseases, such as affect joints generally. By its means the strongest limb in the body is attached to the trunk itself, and from its shape and formation, the various affections to which it is subject are very often detected with difficulty, requiring great caution and sound judgment, based upon previous experience, before coming to a definite diagnosis. A correct diagnosis of this affection at the beginning is of the utmost importance, as upon it depends whether the disease is to be arrested in the early stage or allowed to go on producing mischief.

Upon no other disease has there been more written and more controversy than upon the pathology of morbus coxarius. Some authors, such as Boyer, Aston Key, and Bauer, affirm that it, of necessity, begins in the ligamentum teres; the latter admits that periostitis may occasionally be a cause; others again, as Barwell, say that it originates either in the cancellated structure of the femur and acetabulum, or in the synovial membrane. Miller gave it, as his opinion, that an ositic change takes place in the cancellated tissue of the acetabulum and of the head of the femur, and that after a time a chronic inflammatory process set up.

Sir B. Brodie thought that the disease began in the articular cartilage. Holmes Coote, that the cancellous structure of the head of the bone was first affected, and afterwards the synovial membrane and ligamentum teres. From this labyrinth of opinions it would be hard indeed to come to any definite decision, but judging from pathological specimens I have seen in this city and the different museums in London, England, and also from the progress of the malady, I believe the disease may and does commence in any of these structures. Specimens have been shewn where the ligamentum teres was destroyed at a time when the remaining structures of the joint had only suffered moderately. Tricke mentions one case where he found the muscles, vessels and capsule of the joint sound, but in the cancellous tissue a firm, hard, yellowish-white mass, and that the cancellous tissue was somewhat redder than natural; so, also, other specimens have been collected where the cancellous structure and the ligamentum teres have been injured and the rest of the joint remained comparatively sound. Holmes Coote confesses that, wherever he had opportunities of examining cases recently affected, he almost always found the liga-

mentum teres altered. Bush says, whenever he had an opportunity of inspecting the joints in an early stage—and that was seldom—he found the cavity filled with yellow pus, seldom dry, the fatty tissue in the bottom of the acetabulum hyperæmic and swollen—the synovial membrane rough and thickened—cartilage the same, and sometimes solution of continuity.

The most frequent cause of hip-joint disease, as well as of other joints, is stated by most writers of surgery to be scrofulosis, implying thereby, that it is the symptom merely, or the result of the constitutional diathesis. There are some who deny this, saying that scrofulosis does not rest upon any permanent pathological basis, and that we are left to draw upon our imagination a good deal to recognize its chemical and microscopical characters. They say, and not without reason, that if scrofula did exist and was always the cause of this affection, a person would be liable to joint diseases at any time of life. Facts, however, shew differently. In infancy, that is, before three years, and in old age, the disease is extremely rare. Statistics tell us that joint diseases are most common at the period from six to ten years. They also advance two other strong assertions in their favor, viz.: rich and poor, town and country, are all equally attacked; also that constitutional treatment alone has proved of little benefit in joint diseases, while manifest results follow judicious local treatment. I have seen upwards of two hundred cases of joint diseases, a good proportion of them being hip affections, and in very few of them was it found impossible to trace them to a traumatic cause.

Between the ages of six and ten years, the boy or girl is very active and heedless, consequently, continually meeting with accidents, but after that age, accidents are avoided, and then we see joint diseases decrease. Boys, also, are more subject to the disease than girls, and those children that are neglected by their parents. In the list of cases I have collected, the child attacked has always been one of the most active of the family—the mischief maker,—always in trouble, either tumbling down stairs, or off some high place where his energy, outrage or imprudence had led him.

It is not to be denied that articular affections may arise from a strumous diathesis, and then we find very frequently more than one joint affected, as in a boy, aged 12, admitted into the Montreal General Hospital, under the care of Dr. Reddy, July, 1868, with morbus coxarius of the right hip, and synovitis of the left knee where the patella sloughed

away. There was also tuberculous deposit at the apex of the left lung. Here, the injury was the fall off a horse. My impression of the case, at the time, was that tubercles developed themselves in the lung subsequent to the injury, although I am quite prepared to admit their co-existence.

In a case like this, constitutional treatment is of imperative necessity, *per se*, and also as an adjunct to proper local appliances.

Hip-joint disease has been divided into three stages. Ford, in 1794, first made this division, and it has been retained by most writers. Miller makes but two. I have adopted Ford's division, as being, in my mind, anatomically and pathologically, the most correct. Ford's first stage extends from the beginning of the disease to the time that apparent lengthening appears; the second, from the commencement of apparent lengthening to that of apparent shortening, and the third, from the apparent shortening to the end. These periods are periods of uncertain duration and sometimes of undefinable occurrence. Thus, the disease may occur in a mild form, becoming more severe as it advances, or it may run an obscure course from the beginning with little pain and less fever, leaving even the most observant sometimes in doubt as to the site, nature and extent of the mischief going on. We may have severe acute pain suddenly felt in the leg as well as in the hip and knee joints, and almost at the same time, or very shortly afterwards, hanging forward of the leg with eversion and abduction, thus leaping, as it were, into Ford's second stage at once. Loss of appetite, restlessness and fever are almost invariably present. Pain is now increased by motion, active or passive, but particularly passive. Jactitation of the limb, sufficient to shake the bed on which the little sufferer reclines, now occurs—jactitation, which the surgeon would do well to notice and to check, as now is the time when proper means would be of avail—measures which a short time subsequently would be useless.

This is the *morbus coxae acutum* I have just sketched. A more chronic form, however, is that usually met with where the same symptoms occur, but not so marked, and not attended with so much fever. In the first stage, the symptoms are very deceptive. In children who cannot describe all their sensations, the difficulty is increased. Here we may have slight limping, especially in the morning, which seems to wear off during the day. The child does not exhibit the usual inclination to play, and pain is complained of in the knee, which is most troublesome at night, particularly after those days during which it has had more than its usual exercise. In

adults, the disease usually commences by a sense of fatigue, and often of actual pain either in the hip or the knee; stiffness also is complained of in the morning, and in the evening, pain more or less severe, depending on the amount of exercise during the day. The movements of the knee-joint, notwithstanding the greater or less pain felt there, are perfectly free. This pain has been attributed to irritation of the obturator and sciatic nerves, also to spasms of certain muscles. Towards evening the limping returns and is sometimes absent after a day of comparative rest.

Abduction of the limb is painful, and if the patient be examined the surgeon finds, upon pressing behind trochanter, very severe pain, also tenderness at the groin, where the glands are frequently swollen. The fold in the nates is now flattened, but so far there is no deformity.

In the second stage weakness is complained of in the limb; it is felt to be long as well as weak; it is dragged rather than moved in walking and standing, very little weight is borne upon it, and it is slightly advanced. The child now rests as much as possible upon the sound limb. This is the stage of apparent lengthening. Lameness is now constant and more decided. Pain in both hip and knee, and spasmodic contractions of certain muscles causing great torture to the patient, making him wake up under the idea of some great impending evil and bathing him in a thick clammy perspiration. Wasting of the limb is now apparent, it being thinner, softer and more shrunk in appearance than the sound one. The thigh is now flexed upon the abdomen, the knee is generally rotated outwards, and the feet everted; there is also a lateral twist to the spine, which is caused by the patient attempting to give himself all the ease he can. For the purpose of locomotion, the lumbar portions of the spine and the other hip-joint are brought into use.

The constitution now suffers, rest and appetite are gone; the patient becomes reduced in weight and has a haggard, care-worn look. This stage of lengthening lasts no regular length of time, and the patient, under proper treatment, may recover without the disease advancing further.

Between the second and third stages, there is usually a lull, but only for a short time, and in the case of a young girl under Dr. Hingston's care while I was his assistant, apparent lengthening to the extent of about two inches in one day, was followed by apparent shortening to the same extent on the next. When the disease is in the third stage we find different symptoms, and if we place our patient in the erect posture, we shall see the nates, full, convex and pro-

jecting backwards. The weight of the body is still supported on the sound limb, the diseased one resting on the ground only by the ball of the foot and the heel elevated a good deal.

The knee is also higher than that of the sound side, and the thigh is flexed at hip only, and not at both hip and knee as in the second stage. The diseased side of the pelvis is tilted up. The spine is curved laterally, the lumbar portion having the cavity looking to the disease, while the dorsal is the other way. Tenderness behind the trochanter and in the groin now diminishes, and abscesses form and burst in various places. The third stage is one of apparent shortening. The affected side of the pelvis is tilted up instead of lowered, and the thigh adducted, so that the sound limb is abducted to the same extent as the other is adducted, thus causing the affected thigh to look shortened. Careful measurement shews that it is not real, being altogether due to posture. Such an opinion is held by nearly all authorities on the subject. It is in this stage that the symptoms of dislocation of the femur upon the doreum ilis appears, an end in which all cases of this affection were at one time supposed to terminate.

As regards treatment, each case, before anything is done, should be thoroughly and carefully examined, and sometimes, to do so properly, chloroform is necessary. Children are naturally timid, and often refuse to submit to the necessary manipulation for diagnosis. After examination, the full nature of the case should be explained to the parents, so that they may fully understand the necessity of following all the surgeon's instructions. It will be his duty to enjoin absolute rest for the diseased joint, and that not for a few days, but for weeks. Unless this is done, everything else will be of little service. Next to rest, comes position. This is important, so as to prevent the articular surfaces from pressing together and to give comfort to the patient. There are many ways of doing this, and we have a great many apparatus of different kinds from which we can choose. A great many of them are merely modifications of one another, but the best are Bauer's, Barwell's and Sayre's. Some surgeons use neither of these, but content themselves in gaining extension by means of weight and pulley, and counter-extension by raising the foot of the bed. Others again, simply employ Liston's long splint, in the same manner as in fracture of the thigh. This plan is as good as any, and it aids in preventing the lateral curvature to the spine. All this will do for the first stage, but when we have a case in the second, with apparent shortening, the pelvis tilted up, with retraction of the tensor

vagina, pectineus, and adductor longus muscles, we must do something more, and it is in this stage where the benefit of tenotomy is so evident. To give proper position so that the patient may gain all the necessary rest and freedom from the spastic muscular contractions that now trouble him, the tendons of the muscles at their origin should be divided. After an operation of this kind there is usually great relief from pain. Bauer says it acts antiphlogistically, but with all due deference to that eminent authority, if he had said mechanically, he would have been nearer the mark. Surprising results have been seen from this little operation in knee cases. It is simple, easily performed, and there is no danger attached to it. However, there is a diversity of opinions among surgeons, and there are a good many who are altogether opposed to it. In the third stage the disease has made further progress, all the structures are implicated, and total destruction of the joint may ensue. The pus may make its appearance at different places, between the gluteal muscles, below Poupart's ligament, etc. The treatment now depends on the severity of the case and complications present. Sinuses must be kept open, a very difficult thing to do, but this is almost imperative, and is a rule sanctioned by most surgeons. Rest and position are just as important as ever. When we see the patient becoming exhausted from the continued drain of pus discharged from carious or necrosed bone, conservative surgery should be resorted to and excision of the joint performed. The operation is imperatively necessary if any of the pelvic bones should be implicated, as here, the disease, if left to itself, would soon have fatal termination. Surgeons for a long time objected to operate in such cases, but Hancock has shewed that it can be successfully performed with marked benefit to the patient.

Abstract of the Introductory Lecture at the opening of the Third Session of the Medical Faculty of the University of Bishop's College, Montreal, on October 1st, by E. H. TRENHOLME, M.D., B.C.L., Professor of Midwifery and the Diseases of Women and children.

Mr. Chairman and Gentlemen,—Three summers have passed since this medical school was ushered into existence.

Upon this occasion, the opening of the third session it affords me great pleasure on behalf of this Faculty to warmly welcome you, friends and students. We would be excusable were we to boast somewhat of the past, but our feeling is rather

one of deep thankfulness to God for that to which we have attained; and I trust the future work of this College will be carried on in that spirit of dependence which secures the flavor of Him without which nothing can rightly prosper or satisfy the heart. We are conscious of the deep responsibility that rests upon us to educate and thoroughly qualify our graduates for the all important life-work before them.

The care of the sick and wounded is the highest mission and noblest charge that can be committed to man by his fellow-men. We bear this in mind in our lectures, and it is this which makes us so solicitous over the progress of each student.

Our work may be done imperfectly, and surely it is not for us to laud ourselves; but though imperfect it is earnest, and above all sought to be made practical, so as to stand you in good stead, when pressed by the responsibilities of your calling. We do not plead for ourselves, but rather leave our children to "speak with the enemy in the gate," quite confident that they will give a good account of themselves.

Now as to our facilities for imparting a thorough medical education. Our college building is large, and supplied with every essential accommodation for the work to which it is devoted. Our dissecting room is second to none in this city; our library is being filled with new and valuable books for reference; the lecture rooms are airy and comfortable; the laboratory is arranged to meet all the wants of those engaged in practical chemistry. Arrangements have been made for a thorough acquaintance with Obstetrical practice, a lying in Hospital being now established where a sufficient number of cases will be available to each student.

The Montreal General Hospital, the St. Patrick's Hospital in connection with the Hotel Dieu, and the Montreal Dispensary are open to students of every school, on an equal basis.

The appointments in this Faculty neither have been nor shall be made with reference to any personal friendships whatever; our guiding principle in every selection is the best man for the place. Thus, gentlemen, having boldly exhibited our colors we nail them to the mast of our stanch young ship, and launch forth upon our destined course, each man at his post, and our sails filled with the welcome breezes, the hearty good wishes of our confrères and the people at large.

How well we have prospered the last two years declare, and this session, I trust, no student will be deterred from following the school of his choice by

intimidations or vituperations, let them come from what quarter they will. We welcome all hard workers, and promise our best efforts toward promoting their success.

The science of medicine is broad enough to engage the most liberal and acute of human intellects without danger of exhausting its wealth. Enough of its vast domain has been explored to gladden many a heart, and strengthen many a hand, as her hidden treasures are appropriated by her noble devotees. The apprehension of new truths is a gladsome feast, and happy are they who are called to such a banquet.

It has been said our mission "is one of toil, often but poorly appreciated and never adequately requited," and such is indeed the truth, but not the whole truth, as you will find when tracing the mysterious and attractive operations of the powers of nature as seen in the constitution of man, and the adaptability of those inexhaustible resources which God has placed at our command for alleviating the effects of sin in the world; these, and the happy results of health restored, and life prolonged upon earth, are the exceeding rich rewards of those who enter her ranks and work as becomes true men.

The science of medicine rests upon a basis of eternal truth that can never be shaken, despite the shallow pretences of the quack "pathys" of the day. Upon Anatomy, Physiology, Pathology, and Therapeutics it stands a noble structure, that shall yet command universal homage, when its devotees become more thoroughly conversant with its rich resources laid up for the wants of mankind.

The practice of medicine is, from the nature of our imperfect knowledge subject to many variations. This fact should not discourage us, but rather stimulate to greater carefulness in our researches and observations.

Of the various departments of medicine the greatest advances have been made in those of recent date. Materia Medica and Therapeutics, the oldest of medical subjects, is to-day, we must confess, but imperfectly known. How little we know as to the modus operandi of our remedial agents; the special affinities of certain drugs for certain parts of the body, and their action upon the body in health, and disease, these are vast fields, as yet imperfectly explored, inviting diligent workers with sure promises of reward. Perhaps this condition of the subject is not so much to be wondered at, when we consider that about them, as about nothing else in medicine, has clung the fossil debris of past centuries. Preconceived vague ideas of the action and the therapeutic value of remedies have done more, and are doing more, than anything

else, to hinder true advancement, and help to build up such systems of imposture as Homœopathy, Eclecticism and their kindred allies. We too hastily and sweepingly condemn what is new and strange to us, and surely it was but natural that we should have done so, when the new things were promulgated by professional apostates and ignorant pretenders. Conscious that the basis upon which we work is true and immutable, we have been and are now shutting our eyes to much that we should eagerly investigate.

The time is come when it is the duty every man to shake off *all* the trammels of supersition and bigotry, and recognize, yea and heartily embrace, *truth* which is eternal, wherever it may be found. Wholesome truths are sometimes distasteful, but let us remember that the recognition of failure is half its reformation, and surely it behoves us to lay aside our "paths" and "ists," and maintain the dignity of our position as physicians.

The community in general, and medical schools in particular, are bound to see that graduates in medicine are thoroughly educated in all the fundamental branches of their profession. The community has the inalienable right of selecting as their medical advisers whom they will *from among those properly qualified*. By the term *properly qualified*, I mean those who have acquired a thorough knowledge of every branch of the profession, and such men, as practitioners, are bound by every obligation to afford the most effectual relief to the sick.

Every practitioner has the power and right placed in his hands, to use such means as he deems best, and to employ remedies on any plan or principle he judges correct. To do less were to deny his own manhood, and no man, nor association of men, have any right to dare to interfere with him so doing. His calling is to heal. His business is to address himself to his work. Now, gentlemen, while I contend that each one is responsible to God alone as to the treatment he adopts; yet is each practitioner responsible to the other and the public also. We are bound to disown any man as a physician who, abandoning his birth-right, descends to the narrow limits of any system, and taking the place of the charlatan, proclaims not that he heals alone, but that he heals by a certain method, and thus, by endeavoring to catch the public ear, to make money at the expense of professional honor.

One cannot but long for the time when medical men will be cordially united upon the broad and generous platform of a noble profession; and when the barriers that hedge it about will be sufficient to

enable the most weak-minded to withstand the temptations to avarice and short-lived popularity.

None of us desire to perpetuate ignorance, and yet there is no surer way to do so than by refusing to examine the various pretensions of the day, and sweepingly label the whole as preposterous and false. Let us rather investigate everything that comes before us, and extract, appropriate and use any grain of pure gold from among the rubbish of modern quackery. Such systems of imposture and folly as are around us could not exist except for our own stubborn wilfulness. The community has proved, and we cannot gainsay it, that there are virtues in what we reject "en bloc." Is this as it should be? Are we guiltless when we thus stimulate the less discriminating public to swallow greedily whole systems of folly? I think we are not blameless. It is for us who possess the great advantage of a thorough medical education, to absorb their few facts, on which they rest their rotten superstructure, and leave them as their peculiar possession, the undiluted sham, worthy of such degraders of medicine.

With the loss of seasoning, the perishable wares of these parasites would soon go to decay, and the world be well rid of much suffering and sorrow.

Our profession is broad and liberal-minded, and our platform is large enough to accommodate every honest upright man, let his aspirations be ever so lofty and generous.

There is another subject germane to the thoughts that occupy us, and that is the struggle in which our confrères are now engaged in Ontario. We have watched with much solicitude the working of their Medical Act, and joyfully noted its success. The Act, it is true, was not all that could have been desired, but despite many fears for its success, it has accomplished a grand, noble work for the Province of Ontario. So thoroughly has it worked, that the Homœopaths and others of like kidney, have found their systems, like "Diana of the Ephesians," becoming of no repute, on account of the enlightening presence of the truth. It has been found that students entering college with the intention of practicing homœopathically, &c., have "cast their idols to the moles and bats," as their minds drank of the intellectual streams of a thorough and scientific medical education.

The present law of Ontario provides that all students shall take the same collegiate course, except in the practice of medicine where those homœopathically inclined can attend homœopathic lectures upon that subject. This condition of things is found to be effectually stamping out attenuated nonsense, and hence

the present frantic efforts of Homœopaths and Eclectics to effect its subversion. We earnestly hope their sinister attempts will prove in vain, and trust the general profession will arouse themselves throughout the length and breadth of that splendid Province, and save it and themselves from the hands of such shameless destroyers.

Situated as we are in Quebec, we have a special interest in watching the workings of Medical Acts in our sister Provinces. We need some changes in our own code, and it is high time we were bestirring ourselves to obtain them. There should be with us, as in other civilized communities, but one portal to the practice of medicine, *i. e.*, by an examination passed before a central examining board. If the establishment of such a board for the whole Dominion of Canada cannot be attained, let us, as we are competent so to do, establish it in our own Province. The adoption of this course would annihilate quackery here, as is now being accomplished in Ontario. Much more might be said upon this subject, but it is time we passed on to the consideration of other matters.

It is naturally expected that your attention upon this occasion should be drawn to the great importance of the final branches of your profession. In the able introductory to our last session, the necessity of being thoroughly acquainted with the primary branches was insisted upon, and rightly too, as the foundation upon which the whole superstructure rests. Let me recommend you once more, not to be attracted from the course then urged upon you; for the final branches are but the complement, so to speak, of the primary, and of themselves can never constitute the complete physician. The one is the skeleton, the vertebræ, the very basis of the being, the other the flesh, the external form, which constitutes the beauty and perfection of the whole.

Students sometimes wonder that each professor exalts the importance of his own subject; but it could not, and should not be otherwise. The professor as he meditates upon and discusses his own special subject becomes more and more impressed with its value, and sees in it beauties and attractions unobserved by others. Now, while the successful practice of medicine most undoubtedly does rest upon a thorough knowledge of the primary branches; yet it is also true, that such success can only follow where there is a thorough and rational apprehension of the principles of the final branches.

The unfolding of the charms and deeply interesting attractions ranged before your mental vision by our respected dean, Dr. David, the professor of that

most important subject, will, I am sure, be appreciated by you as the chief corner-stone of your professional education.

Upon surgery any remark is almost superfluous. Nothing will contribute more to your success than such acquaintance with its theory and practice as will make you able to render prompt and efficient aid when called upon. The triumphs of surgery are neither few nor small, and these will be vividly placed before you by its esteemed professor, Dr. Godfrey. But, gentlemen, while it is worthy of all the honor and benedictions heaped upon its successful votaries, you must bear in mind that its triumphs are apparent, and seize more quickly upon the public mind than other work but little recognized, perhaps, because accomplished in greater seclusion. With regard to Medical Jurisprudence you will do well to give such attention to the subject as not only to reflect credit upon the able professor of that branch of your studies, Dr. Gardner, but also to save yourselves from much humiliation when interrogated as a skilled witness in courts of Law. Hygiene is a branch of great importance, as you will be sure to think when its intimate connection with advanced civilization and national prosperity is brought to your notice by your worthy professor, Dr. Leprohon. It is a subject to which he has devoted special attention, and while an acquaintance with it is rightly insisted upon by this University, I am sure you will at the same time find the course deeply interesting, and your minds stored with most valuable and practical information.

Pathology is another subject specially taught in this school as in the schools of Europe, and as it shortly will be in every well conducted school in Canada, its importance demands for its consideration more than a few cursory lectures appended to the course upon Physiology or the practice of Medicine. It is one of those branches you must know if you would be successful, or worthy of your name. Much attention is required in pursuing your preliminary researches, but when once comprehended, your progress will be pleasant and profitable, especially so under the painstaking labors of Dr. Wilkins, who so creditably occupies that chair.

But, gentlemen, valuable and necessary as is a thorough acquaintance with all these, yet another subject takes a paramount place, and claims a few moments consideration on the present occasion. The art of Obstetrics, and the treatment of diseases peculiar to women and children, have made immense progress during the last few years. A more correct appreciation obtains as to what nature can accom-

plish in parturition, and at what point it is necessary to supplement her powers, or take the work out of her hands in order to best overcome imperfect formations of either mother or child. This art is now almost a perfect one, as is demonstrated by the many valuable lives which are now saved out of a condition of things where formerly destruction alone awaited them.

It shall be my earnest endeavor to so place this subject before you as to secure your attention, and render you masters of an art that will, perhaps, do more toward making you successful in life, than the practice of any other branch of your profession.

The consideration of diseases peculiar to women is of recent origin, and is at present occupying the attention of some of the best minds of the profession as is proved by the almost daily discoveries in their pathology and treatment. Even within the memory of almost the youngest, what advances have been made!

Woman, that most wonderfully attractive being, the fairest and most lovely of all God's creatures, is most exquisitely endowed with a hidden inner life, which until of late, was, in a scientific point of view, comparatively unknown.

When one thinks of the hosts of fair invalids that have gone to a premature grave, how they have silently and uncheered endured sorrow without hope of relief or, that warm heartfelt sympathy which they deserved but received not, we can but thank God for what has been done in this rapidly developing department of our profession.

Ovariectomy, which at its outset was met by every species of slander and derision, is now one of the recognized surgical operations, and from the success to which it has attained may be regarded as an almost perfected branch of surgery. Any vagueness in the diagnosis of abdominal tumors is being rapidly removed by the accumulation of ascertained facts, and more recently still, by the genius of Prof. Simon of Heidelberg, has been placed on as perfect a basis as the operation itself. By this new method, which will be discussed in due time, the differential diagnosis of pelvic and abdominal tumors is certain and clear, and the treatment of some of the heretofore untreated derangements of the abdominal viscera is also possible by the same means. One feels like lingering over such a subject, fraught as it is with new and life-giving impulses to this attractive branch of your studies. This department has progressed to report on every hand, and the treatment of interstitial fibroids of the uterus has been improved and perfected. Much advancement has also been made

in the treatment of other forms of disease, and many a woman is to-day in the enjoyment of health, who but a few months ago would have been thought beyond the hope of any successful operative procedure.

Another subject which receives special attention in this college is the diseases of children. This is as it should be, for there can be no doubt but that vast multitudes of children pass to an early grave for want of a better acquaintance on our part with their diseases and treatment. Of late there has been vast progress made in this department. The profession are learning that too active and strong treatment is worse than trusting to nature alone; also that suitable doses of simple remedies are more efficacious than heroic doses of emetics, purgatives and astringents. These latter have had their day, and a more hopeful era is dawning upon the suffering multitude of children struggling for life. I count it no small privilege to have the pleasure of addressing you during a large part of the present session upon this deeply interesting and important subject.

In this city so beautifully, and one would naturally suppose healthily, situated, our infantile mortality is simply astounding. This great waste of human life must surely lie at our doors, as it cannot be the work of that Beneficent Creator who "makes nothing in vain." His design, that they should fill and replenish the earth is frustrated by our criminal negligence or indifference, and we must bear the responsibility. It is to be sincerely hoped that ere long a thorough system of enregistering births and deaths will give reliable data to work upon; and that sanitary science and a better knowledge of the medicinal and hygienic treatment of infants, will relieve us from the heavy charge of slaughtering the innocents.

Before I conclude I wish to say a word as to the personnel of this Faculty. We are happy to be able to say that no break has occurred in our circle. The Professor of Chemistry, Dr. J. Baker Edwards, is enabled to retain his professorship, the Faculty having unanimously appointed our late distinguished student, Dr. Shaw, his assistant, and lecturer upon that important subject. It has afforded my colleagues and self no small satisfaction that the best man we could obtain for that post was also a graduate of Bishop's College, and we cordially extend to our new lecturer our best wishes.

The working power of this Faculty has also been still further increased by the appointment of an assistant demonstrator of Anatomy, which post we are glad to say has been filled by the best graduate of our first year. We are confident that the work of Practical Ana-

tomy in Dr. Latour's hands will be efficiently performed. We wish him success.

Another appointment has also fallen to the lot of one of our graduates, one whose name heads the roll of matriculated students who have entered this Faculty and who by unanimous vote now fills the post of Curator of the Museum. We also wish Dr. Nelson every success, and confidently rely upon him as upon his colleagues for the faithful discharge of his duties. Bishop's College "expects every man to do his duty."

In conclusion, gentlemen, while I would fain attract your attention and arouse your enthusiasm to pursue with energy and devotion the work before you, yet I would not for one moment seek to make you believe that all before you is fair, easy, and pleasant. Such is not the case in ordinary things of this world, and such, believe me, is not the case in medicine. The fairest mountain-scenery, the purest atmosphere, the most body-strengthening and soul-stirring panoramas of nature are realized only after much toil in the weary ascent; so is it with us, we labor and press onward and upward through many difficulties, refreshed, no doubt, in our path by springs from the mountain side, as we drink in truth after truth, and thus encouraged we start forward with new vigor for the goal set before us, and with minds longing for a more full realization of that which has gladdened us by the way, till we at length rest, our work done, our toil ended, and we ourselves gone to our sure reward.

May it be for each and all of us to hear the welcome words, "Good and faithful servant enter thou into the joy of thy Lord."

MEDICAL FACULTY OF MCGILL COLLEGE.

Reported for the Canada Medical Record.

OPENING LECTURE.

The opening lecture of the Medical Faculty of McGill College for the season of 1873-'74, was delivered by Dr. Howard, Professor of Practice of Medicine, on Wednesday, the 1st Oct. inst., there being a large attendance of the Faculty and of the students.

The learned professor on opening his subject said it would be proper for him on an occasion of that kind to address to them more particularly words of counsel and advice; and in doing so he would claim the indulgence of those who had listened to these deliverances in former years, and also of the freshmen to whom it was entirely new. He would ask permission to address words of encouragement to all

who were there for the first time, and to bid them a hearty welcome. He would also welcome those whom they had the pleasure of seeing there before, and in return for the confidence they had manifested in them, which confidence he hoped would be continued, they would do their best in carrying out the task and acquitting themselves of the responsibility they had undertaken.

But in referring to the duties now before them, a few remarks on the qualifications of students would, he thought, not be out of place. For many years past, he was thankful to say, one of the first qualifications necessary for entering upon the profession of Medicine was a good moral character; then in education, a knowledge of Greek and Latin to some extent, of mathematics and of the ordinary simple branches was necessary, as well as of the French and English languages.

In 1866, the Council of Ontario adopted the laws which had been adopted some time previously by the Council of Great Britain, and which constituted also a very important improvement in Lower Canada practice. To the Canadian and American schools belonged the merit of having first adopted the practice which was not even yet enforced by the Examining Boards of the mother country. The training of the mental faculties forms the best preparation possible for obtaining a knowledge of those branches, of learning which constitute the medical curriculum. Much of the time now spent in Latin and Greek might with great advantage be given to a more thorough knowledge of the practical branches such as mathematics, physics and chemistry. The habits and training acquired by the study of these branches were very important in after life in all their education and requirements. Compared to these, however, the other branches which they were required to learn as preparatory to a medical course were in a great measure unimportant. In corroboration of these views he was pleased to be able to give the remarks of Dr. Hucksley. He said that a great step was made towards their medical education by acquiring a knowledge of the physical sciences and also an elementary knowledge of physics, that there might be some preparation for medical colleges.

Passing now to the medical curriculum, there were two divisions in which it was placed—the primary and final. In the first the student was required to acquire a knowledge of botany, materia medica, chemistry, physiology, and anatomy. A thorough knowledge of these subjects formed the basis of the medical art. These should occupy a great portion of the students time. To many these appeared in a great measure to

consist of a mass of dry details and unconnected facts. One of the features of anatomy, however, was that in its study they were not dependent on books. They had the means of making it much more interesting and of studying it with both pleasure and profit. This was by the dissecting room, which had for many years past almost superseded the use of books in this branch of medical education. And of the advantages offered by this means of study he would advise them to make most liberal use. There was a time when the study of anatomy by this means was very little understood. It was not until after Munro introduced his practice with regard to it that the dissection of bodies was practiced to any extent. Before his time an average of two bodies every year were all that were used for this purpose. Very important also was the knowledge of the uses and functions of the various parts of the body taught by physiology. A close investigation of the anatomical structure and form will very materially assist in making known these functions. It was scarcely necessary to state that they must be acquainted with these functions of the body and of its different parts and members to be able to render any valuable assistance in any disease. Improvements and advancement could always be obtained by a close study of this subject, but a thorough study of it was indispensable, even though it failed to make any addition to the science of medicine. Great discoveries were now being made by means of this branch of the art, a knowledge of which was not sufficiently indicated, but which he was sure would benefit every department of medicine. He would, however, venture to say that a thorough study of morbid anatomy would lead to the more important topics of physiology proper.

Another subject requiring the most earnest attention was chemistry. While it was assumed to form part of the liberal education of every man at the present day, it was at the same time indispensable to the study of medicine. It plays a most important part in the functions of the body, especially in those which concern animal heat and the respiratory organs. It was also a great assistance to the study of *matéria medica* and therapeutics. The importance of therapeutics to the student also could not be too much urged, as it forms to a considerable extent the necessary preparation to the proper use of medicine. A great deal more was known now about the capabilities of the medicines in use than was known a few years ago. Much is known about the real properties of medicines and their

action on the healthy structures and functions, and from these was inferred their actions on morbid structures and functions. To these subjects he would counsel them to apply themselves most earnestly in the early stages of their education, as, afterwards, they would not have much time to devote to them.

The final examination dealt with the four branches of midwifery, surgery and practice of medicine and medical Jurisprudence. He would offer some remarks on the method of acquiring a knowledge of these branches. It would be the duty of the final professors to impart to them a knowledge of these branches in all their parts. They would lecture on them, and he would counsel those students who had arrived at that stage of their medical training to pay special attention to these lectures. He referred to the system of taking notes of the lectures, and assured them that many had found these notes of the greatest value, even after they had passed their examinations and had commenced to practice. But it was in the hospitals that they would acquire the most practical instruction. He referred to the first establishment of hospitals by monks, and said the teaching acquired in these institutions was called clinical or bedside teaching. Indeed by some these were used entirely for lectures on physic. The lecturer took the student to the bedside of the patient, and gave him a statement of the disease under treatment in a regular and methodical manner, of the symptoms it produces and the manner of its treatment, and finally uses it to show that the principles laid down in the books were rarely those practised at the bedside. It will also teach the student with regard to anatomy.

While the lecturer treated the principles of disease; in the hospital they would obtain a knowledge of the treatment.

The study of disease, while in some cases only supplementary to the knowledge acquired at lectures, other subjects of the highest importance were and could only be learned at the bedside of the sick. This was especially the case in the treatment of wounds, &c. He would counsel them while students to become familiar with these things, for when they were in practice they would be without teachers to aid them, and would be entirely dependent on their own skill and education. And it was while attending the hospital that they would acquire a knowledge of morbid anatomy. The clinical teacher on the death of the patient, would demonstrate to them at the post mortem examination of the body the correctness of his diagnosis or the incorrectness of it, and the object of the treatment he had used;

and there they could learn lessons which would be of life-long value to them, as well as to their teacher.

In the hospitals also they would learn practically the uses of drugs in the various diseases, and also the proper doses and proportions; they would learn to form a correct estimate of the power of the various drugs, and come to employ them with more skill and confidence. He would impress on them the necessity of learning them all thoroughly and equally, as they were indispensable to the man who would practise in all the departments of their art. For to practise in all the departments or be able to so practise must be the aim of every student of medicine, although afterwards, when they become more familiar with their profession, they might cultivate any aptitude they might have for a specialty. No profession presented so many different departments as theirs.

In summer time they should employ themselves in systematic work for a certain number of hours every day. They should not consider when the end of the term arrived they had nothing more to do until another term began. They would require recreation and holidays, but they should spend as much of the time as possible at the bedside of the sick, studying the course and nature of disease in all its forms. It might be the only opportunity many of them would have to become acquainted with the preliminaries of their education, and he would urge on them the desirability of making good use of it.

They were entering on the study of medicine at a favorable period in its history. He did not allude to the time in which the physician forfeited his fee if his patient died; nor that period when an edict of the Pope condemned the physician to a life of single blessedness. He alluded to the temper which pervades and affects modern as compared with ancient science. Now-a-days experiment and comparison were the only safe sources of deduction in medical science.

The method of advancement now was more hopeful and desirable.

He referred to the use of the thermometer in the study of the disease as one of the great improvements of modern days. It had already done good service. The lecturer also referred to various other discoveries and improvements which had assisted greatly in the promotion of the science. They were the natural out-growths of the truth-seeking spirit of the age. He also referred to the discoveries made by Dr. Osler, a graduate of a Canadian College, which were attracting great attention. He would

like that some liberal person would endow a chair in order to allow this worthy member of their profession an opportunity of carrying out his discoveries in connection with McGill College.

He also referred to the education of women in the science of medicine which was being introduced in England and elsewhere. While he did not think that women could ever take the place of professional men in all the branches of their science, he believed there were some departments of it for which they were especially adapted. He referred more particularly to clinical treatment, and as nurses for which they could be especially prepared. For this they should be required to go through a regular course as ordinary students, and take out diplomas to practice as such.

He would counsel them in conclusion not to be dismayed at the work laid out for them; but to take courage and they would soon overcome the difficulties of the task. He urged them to make a good start, and they would reap the benefit of it every succeeding year. They should also avoid attending too many lectures at the same time, but employ the summer as industrious as the winter. They should also while making good use of their time, take good care of their health. There was nothing gained by overwork. Many men broke down by injudicious application to study. They should also while studying especially, be mindful to take plenty of out-door exercise, at least from one to two hours daily. He also cautioned against gliding into the too common errors of modern philosophy, with regard to the laws of matter and force, and concluding that the great mysteries of revelation were beyond their learning or beneath their study; but to ascribe all knowledge to that Infinite Power which has created all things.

Correspondence.

To the Editor of the Medical Record.

LONDON, St. Thomas Hospital, 4th Sept. 1873.

Dear Sir.—Amongst the numerous novelties that we meet with daily in the London Hospitals, one of the latest is bloodless operations. Macormac removed a leg to day, amputation in the middle third of the thigh; there was scarcely a drop of blood lost. He commenced by bandaging the limb from the toes upwards with a strong elastic bandage, applied so tightly that all the blood was forced out of it. He then twisted very tightly round the thigh and just above the bandage a rubber band fastened with steel clasps; the bandage was then

removed, the limb looked quite white and dead, the vessel being perfectly empty; the operation was proceeded with in the usual manner, the vessels tied and bandage removed. I generally leave my Number of the Record on the library table; it is a great favourite with the students. I was delighted to hear from one of the graduates that the prospects of Bishop's College were so good for the coming year. Wishing you every success.

Believe me to remain, Dr,

Yours very sincerely,

R. F. GODFREY, C.M., M.D.

Progress of Medical Science.

A LECTURE ON CHRONIC CERVICAL METRITIS. USE OF THE ACTUAL CAUTERY.

By F. H. GETCHELL, M.D.

(Clinical Lecturer on the Diseases of Women and Children in the Jefferson Medical College.)

Among the most obstinate cases met with by the gynæcologist are those of chronic inflammation of the parenchyma of the neck of the uterus. This condition occurs oftenest among women who have given birth to children, and parturition and abortion are no doubt the most frequent causes. The disease may exist for some time without giving rise to much pain or uneasiness, but in cases of long standing the discomfort is generally very great. You will find the patient will complain of constant pain in the lumbosacral region, of a dull aching character, accompanied by a dragging sensation in the loins, and in many cases by a sharp pain in the region of the left ovary. The increased weight of the uterus always causes more or less prolapsus, and these patients will often tell you that they feel as though "every thing inside them was falling away." The prominent sympathetic symptoms are indigestion and all its accompanying annoyances, such as loss of appetite, nausea, constipation, and flatulence, often causing a semi-tympanitic condition of the abdomen that vexes the patient exceedingly. You will find it a very common thing for these patients to complain that they have not a dress they can wear, on account of the puffing up that is sure to come on a short time after eating. Headache is a very constant symptom; and, while the cephalalgia may exist in any part of the head, it is said by some authors to be located so generally at the top that pain at the summit of the head is by them considered pathognomonic of inflammatory disease of the cervix uteri. I have not found this to be the case; but, while I have found headache to be a very constant symptom of cervical metritis, in a majority of the cases it has been located in the frontal region, and not at the top of the head. You will find that most of these patients are very despondent and low-spirited, and in cases of long standing, particularly if they have been under treatment for some time without benefit, you will often find it very difficult to convince them that there is

any hope of improvement. It is a remarkable fact that the mental depression experienced by the patient is often in striking contrast with her general appearance. It is no uncommon thing to see one of these patients presenting the appearance of perfect health, and to learn from her that life is a positive burden, and nothing depresses her more than want of sympathy on the part of her friends, accompanied with insinuations that her troubles are imaginary. This fact should always be borne in mind; and because the patient is fleshy, and to all appearance healthy, you must not decide that she complains without cause, till you have made a thorough investigation of the case.

The diagnosis of chronic cervical metritis is not attended with difficulty, and it is chiefly by the touch that you will ascertain whether the case is one of chronic inflammation of the uterine neck. You have no use for the speculum until you have made a thorough digital examination; the speculum is a therapeutic instrument, and is not to be compared with the educated finger as an aid to the diagnosis of uterine diseases. On introducing the finger within the vagina, you will find the uterus low down in the pelvic cavity, the cervix very much enlarged, in some cases to the size of a woman's fist. On pressing the finger firmly against the neck of the uterus, you will find it to be very hard; so firmly condensed is the tissue that all the elasticity of the healthy organ has gone, and we have hypertrophy and induration of the entire cervix instead. The os is generally patulous, and will often admit the end of the finger; but this is not always the case, for you will sometimes find the cervix enormously hypertrophied and the os will barely admit the uterine sound. By bi-manual palpation and the measurement of the cavity with the sound you will be able to diagnose the case from one of general metritis; and you will not confound a case of chronic cervical metritis with one of simple congestion if you remember that in the one case we have the cervical parenchyma injected with blood and communicating a soft elastic cushiony feel, softer than in the normal condition of the uterus, while if the enlargement be due to chronic inflammation we have an increased growth of the connective tissue, which exists in much larger quantity in the cervix than in the body of the uterus, together with an effusion of plastic lymph, which renders the cervix so dense and firm that you will at once recognize the existing condition as one of hypertrophy and induration.

In many cases the epithelium is gone in spots or patches, and there is hypertrophy of the villi. A variety of names are given to this condition of things, but the only point that I wish you to remember in this connection is that these ulcers, if we may call them such, are caused by the inflammation, and are not the cause of it: the treatment is the same whether they exist or not. In some cases we have profuse leucorrhœal discharge, in others none at all: this depends upon the extent to which the cervical mucous membrane is involved in the inflammatory action.

In regard to the treatment, as I have said before,

these cases are often very obstinate, and many of them go the rounds, and months and years go by and the lumbo-sacral back-ache is always there. Still, notwithstanding this discouraging picture, I believe if the patient is willing to follow your directions, and is content to wait a reasonable time for results, you will be able to reduce the most densely hypertrophied cervix to a healthy condition. If the case has been under treatment before you are called to the patient, the chances are that she has had solid nitrate of silver applied once a week for a longer or shorter time; it matters not which, for the hypertrophied and indurated cervix may be touched with nitrate of silver every week till doomsday without reducing its size. In order to substitute a healthy reparative inflammation for an unhealthy, unmanageable condition, you must cauterise; and nitrate of silver is not a cautery; it acts in these cases as little more than an astringent; the most it does is to cause a slight shedding of the epithelium. You do not apply the powerful cautery to reduce the size of the uterine neck by destruction of the tissue by burning it away, but you apply it to set up a subacute inflammation, under the influence of which the induration and hypertrophy will subside and the uterine structure resume its healthy elasticity. The strong caustics most frequently used in these cases are the acid nitrate of mercury, potassa cum calce, potassa caustica, and the actual cautery. As the last is the only one I ever use, I will describe the manner in which I use it, without further reference to the others. The idea of the actual cautery is always alarming to the patient, and may be said to remind us of the mediæval tortures; and if we were obliged to use live coals, bellows, and red-hot irons, I fear we should get few women to submit to the treatment; but the use of these little sticks of charcoal, that I show you here, you are able to do away with all that is alarming about the actual cautery, and to apply it to the uterus without informing the patient what kind of an application you are about to make. These little sticks are made of nitrate of potash, charcoal, and pulverized acacia, in the following proportions:

℞ Potass. nitrat., gr. xx;
Carbo ligni, 3 vij;
Pulv. acaciæ, 3 j;
Aque, q. s. M.

This paste is formed into sticks; the most convenient size I have found to be about two inches long and about as large around as the little finger; the ends of the sticks may be rounded to a point; after being allowed to dry they are ready for use. If you hold the end of one these sticks in the gas-flame for a moment, you will convert from half to three-quarters of an inch of it into a live coal: this you can do in another room, thereby avoiding the display of combustion before the patient. When once the end of the stick is thoroughly ignited you can put it down until you are ready to use it, without any fear of its going out, for it will continue to burn until the entire stick is consumed, which will require for a stick two inches long from fifteen minutes to half an hour. The patient being placed in a proper

position, you introduce the speculum, which must be a conical one, and may be made of wood, ivory, or block tin; and I have often used the ordinary glass speculum. There is not heat enough from the caustic to do any harm if a glass one is employed; but the wooden one that I here show you is the one I prefer. Having introduced the speculum and wiped the cervix dry, you take the caustic in the forceps and apply it, about four or five lines from the os, to the lip that is most hypertrophied (for in some of these cases one lip of the cervix will be three or four times the size of the other.) Now, if you make slight pressure for a few seconds, you will destroy the tissue over a space of about the size of a three-cent piece and for about two lines in depth. The pain is very slight,—but little if any more than that caused by the application of nitrate of silver. On withdrawing the cautery I sponge the parts with cold water. I then introduce a pledget of cotton saturated with glycerin, and direct the patient to remain in bed for the next forty-eight hours, and to keep her room, reclining on the lounge for the greater part of the time, for three days more. At the end of the first twenty-four hours you may remove the pledget of cotton by pulling upon the thread, and then inject the vagina with cold water; this may be done every day, until the slough comes off, which is generally in from five to eight days. I then paint the cervix every fourth day with the following:

℞ Potass. iodidi, 3 ss;
Iodinii, Div;
Glycerinæ, 3 j. M.

The actual cautery may be applied with advantage once every month, and the best time is from five to ten days after the cessation of the monthly discharge. If you have the full co-operation of the patient, you will be able to reduce the most densely hypertrophied cervix in from three to five applications. In regard to danger from the use of the actual cautery, of course it would be very easy for a bungler to do harm with it, and great care should always be exercised in the use of any caustic; so far, I have never had any difficulty with it, and I have been using it for several years, and believe it to be more manageable and less likely to do harm than the potassa fusa that is so often used in these cases. I wish you to understand that I only recommend you to use the actual cautery in those cases in which the parenchyma of the cervix is the seat of hypertrophy and induration intractable to agents of less power.—*Philadelphia Medical Times.*

BELLEVUE HOSPITAL, NEW YORK.

NOTES OF TREATMENT.

Intermittent Fever.

Some preparation containing quinine is usually given by all divisions in the treatment of this disease. The following, "Clark's powder," is given almost exclusively on the third division:

℞ Pulv. opii, gr. j;
Pulv. capsici, gr. iij;
Quin. sulph., gr. x. M.
S.—Dose.

This is given about four hours previous to the time the chill is expected. If admitted during a paroxysm, or shortly after one has ceased, the powder is given and repeated as above. This rarely fails to break up even a prolonged series of paroxysms, and in recent cases almost invariably succeeds. By others, quinine alone is administered. The patient is rapidly brought under its influence in the following way: If the chill be expected in the morning, quin. sulph. gr. x are given the night previous, and again in the morning, one dose four hours, another dose two hours, before the time the chill is expected to occur. In the majority of cases this is successful in warding off the chill. If, however, it occur, a hypodermic of morphia is sometimes administered; but oftener the above dose (gr. x) is repeated in the hot stage, and quininism produced and maintained until the disease yields. In addition to this, some preparation of iron is given, as tr. ferri chlorid. ℥ x-xxx t. i. d. The hypodermic administration of quinine is being used extensively here, usually with favourable results. The solution adopted is the following, suggested by Dr. F. D. Lente, of Cold Spring, New York:

R Quiniae sulph., gr. l;
Acid sulph. dil., q. s.;
Aq. ebullient., ℥ j.

Allow this to cool; then add—

Acid. carbolic. (cryst.), gr. iv. M.

Of this, ℥ x-xxx or more may be injected subcutaneously without danger of producing abscesses, such as commonly arise by the use of the ethereal solution. Dr. Lente states that, although he has used it constantly in his practice, he has never seen an abscess caused by it; and a similar experience has attended its use here. This method is especially useful in cases of coma into whose causation malaria is suspected to enter; also in cases where it is necessary to bring the patient rapidly under the influence of the drug.

When quinine fails to arrest the paroxysms, arsenic is employed. A patient with malarial neuralgia of several weeks' duration had been treated with quinine in all the methods recommended, with no beneficial effect. Liq. potassæ arsenitis ℥ viij t. i. d. put an end to the trouble in two days, the patient being discharged cured in ten days.

HYPERPYREXIA.

If malarial, this is treated by quin. sulph. gr. v. q. 4 h., and even in diseases in which no malarial element exists quinine is given. A temperature of about 104° F. is usually treated by quinine as above, and by tinct. aconit. rad. (Fleming's) ℥ j. q. ½ h. for three or four doses, then q. i h. In sthenic inflammation this is the most common method, and is usually successful. If the temperature rise above 104° F., sponging the surface with water is employed, somewhat differently on different divisions; some preferring cold, others tepid water. Several cases of insolation were treated on one division as follows: by means of an ordinary garden-sprinkler, water as hot as could be conveniently borne was sprinkled over the body, an attendant on each side of the

patient fanning the surface vigorously meanwhile. By this means the temperature in all cases rapidly fell, and did not show the same tendency to rise immediately that is observed when cold water is used. Ice-bags to the head, and cold-water injections into the rectum, were also used in some cases.

DIPHTHERIA OF WOUNDS.

Several cases have occurred during the past month in the lying-in-wards of diphtheria of wounds of the mucous membrane acquired during labor. The practice has been in almost every case to cauterize the surface with argent. nitrat. fus., and to apply cloths moistened with "black-wash" to the wounds. In one case cauterization was adopted, and no other local application made, the parts being syringed out thrice daily with sol. acid. carbolic. (gr. x-℥ j). Resolution quickly followed in the last, and in all the others except one, which was complicated with puerperal fever. In all cases of fetid lochia, injections are employed either of the sol. acid. carbolic. or infus. chamomil.—*Philadelphia Medical Times.*

GLYCEROLE FOR CHAPPING OF THE SKIN.—

R Oxide of zinc, gr. xx;
Tannic acid, gr. xv;
Glycerin, ℥ ix;
Tincture of benzoin, ℥ ss;
Camphor, gr. xv. M. lb.

BELLEVUE HOSPITAL, NEW YORK.

NOTES OF TREATMENT.

Bright's Disease.

In this affection diuretics are employed, a favorite prescription on one division being,—

R Potass. bitart., ℥ iv;
Inf. digitalis, ℥ iv. M.
S.—℥ ij—℥ iv ter in die.

On another division a case is being treated by the administration of large quantities of water,—about six pints being given in twenty-four hours. Diminution of this quantity is followed by serious symptoms, which disappear when the amount is again increased. Inhalation of the vapor of ol. juniperi has been tried on another division, the effect in some cases being well marked, but negative in others. The bowels are kept open by occasional doses of Murchison's powder on one division, by elaterium on another. Iron and quinine are given as tonics; the tr. ferri chlorid. being preferred by some.

A favorite prescription on the second division is:

R Ferri sulph. exsic., gr. ij;
Quin. sulph., gr. j;
Ext. gent., q. s. M.
S.—Pil. j ter in die.

If there be much anasarca, strychniæ sulph. is sometimes added to the above. In ascites, stupes of digitalis infusion are placed over the kidneys occasionally with benefit.

If delirium or convulsions ensue, in addition to the use of eliminative remedies, as elaterium, hypodermic injections of Magendie's solution of morphia are given, with the object of lessening the sensibility of the nervous centres to the action of the blood-poison. This treatment, suggested by Prof. Loomis, seems to be efficient in a large proportion of cases. In uræmic coma, stimulating enemata, with the hot-air bath, are the means usually adopted.

Delirium Tremens.

In cases of injury complicated with this trouble, Dr. Griffith, of the third surgical division, is in the habit of giving as a drink, in twenty-four hours, infus. artemisiæ absinth. Oij; also giving porter. On other divisions, chloral hydrate is given, associated with bromide of potassium, as in the following:

R Chloral-hydrat., 3 ij;
Potass. bromid., 3 iv;
Aq. cinnamomi, 5 ij. M.

S. one teaspoonful every half hour until sleep occurs.

Usually only a few doses are required to produce this result.

Cholera Infantum.

If the disease have reached the cold stage, the best results are obtained by the administration of the "eau albumineuse," prepared by dropping the white of an egg in a teacup half full of water, gently stirring [not beating], until the albumen is dissolved. To this brandy is added, so that each drachm contains from two to five drops, varying with the age of the child. A teaspoonful is given every half hour, the patient being also wrapped in blankets, and the surface stimulated by applications of ol. camphorat.—*Philadelphia Medical Times.*

THE VALUE OF SODIC BROMIDE AS A NERVOUS SEDATIVE.

W. AINSLEE HOLLIS, M.D.

Bromide of sodium, although known to have a therapeutic action analogous to that of the bromide of potassium, has lately somewhat fallen into disuse, while the latter salt has been recommended as a remedy for nearly every disease. The bromide of sodium has a pungent saline taste, is freely soluble in water, and forms a colorless solution. Shortly after it is taken into the stomach, a burning sensation is experienced at the epigastrium; this quickly passes off, giving place to drowsiness and sleep, followed by numbness in the extremities, which does not disappear until several hours after waking.

The following cases illustrate its beneficial action in nervous diseases. Fred. B., æt. 21 years, came under treatment for epilepsy, November 13, 1872. From early childhood the attacks had occurred three or four times weekly. He was treated for the first month with thirty-grain doses of bromide of potassium thrice daily, combined with one-third of a grain of extract of belladonna at night. As the attacks diminished but little in frequency, a seton was inserted in the back of the neck; for a short

time after this the fits appeared to be less frequent and severe, but, as he complained of lowness of spirits and debility, one grain each of sulphate of iron and sulphate of zinc were ordered to be taken three times daily. This was continued only one week, as the symptoms returned with their former severity. Bromide of potassium was resumed, in forty-grain doses: this, with the addition of succus conii and a fresh seton, composed the treatment up to May 22, 1873, no effect being produced. On the 22nd he was ordered three grains of bromide of sodium three times a day; and during the next week he had only two fits. On May 29 each dose was increased to fifteen grains, and on June 5 to twenty grains: in the interval he had several attacks of "petit mal," but no marked epileptic seizures. After this he improved much in general health, and had but one fit. In another case, a boy 14 years old, who had been subject to epilepsy from birth, after subduing the paroxysms by taking ten grains of bromide of potassium three times daily, suffered no return on the substitution of three-grain doses of the bromide of sodium, although he felt much depressed.

In a third case of epilepsy, the fits were checked by taking daily fifteen grains of the salt in three doses; here also general depression was marked. This depression of spirits very frequently accompanies the use of the medicine in a watery solution, and might possibly be counteracted by the administration of a tonic in combination.

In two cases of nervous excitement due to mental anxiety, and in one of epileptic vertigo, small doses of the bromide produced great relief, while in a case of insomnia in an old man it appeared to do harm. We have, therefore, in sodic bromide, where judiciously used, a valuable nervous sedative.—*Practitioner, August, 1873.*

ON SIMPLE VERTIGO.

In a paper read before the Yorkshire Branch of the British Medical Association, and published in the *British Medical Journal* for July 26, 1873, Dr. Clifford Allbutt records ten cases of simple vertigo, and makes the following comments upon them. The only constant symptom in the cases was vertigo. All of them were males, and, as far as could be made out, the giddiness was not symptomatic of any other disease or disorder. The vertigo was often very distressing and very rebellious to treatment. The average age of the patients was 44.7 years; but there was no evidence of any degenerative changes either in the arteries or other tissues. The vertigo, after lasting for months or years, disappears without any other nervous or other disease being developed. There was no loss of consciousness in any of the cases recorded. "One patient suffered from migraine, which ceased about the time of the onset of the vertigo; another belonged to a neurotic family. Many of them were men of anxious or irritable temperament, or placed in positions of anxiety and heavy responsibility. In another patient, also a male, there was some hysteria." In some of the

cases the dizziness was followed by sickness. The vertigo came on at no fixed time, but was generally worse in the forenoon. Among the exciting causes of an attack are mentioned the noise and whirl of the streets and the sight of a carriage. The attacks sometimes recurred during quiet or even in the dark. "Assuming the erect posture in the morning often produces it (the vertigo), so that the sufferer has again and again to return to his pillow."

Dr. Allbutt does not think the disease depends upon vascular changes, but that it is "one of the cerebellum, or of the great basal ganglia near it." Remedies addressed to the stomach as a rule do no good. He recommends complete change of scene, and removal of all causes of nervous depression, and Turkish baths. Strychnine is the only drug which he has found of much use. Leeches, blisters, purgatives, etc., do more harm than good.

SPECIALTIES.

Dr. Robert Barnes says, "I have recently been honored by a visit from a lady of typical modern intelligence, who consulted me about a fibroid tumor of the uterus; and lest I should stray beyond my business, she was careful to tell me that Dr. Brown-Sequard had charge of her nervous system; that Dr. Williams attended to her lungs; that her abdominal organs were entrusted to Sir William Gull; that Mr. Spencer Wells looked after her rectum; and that Dr. Walshe had her heart. If some adventurous doctor should determine to start a new speciality, and open an institution for the treatment of diseases of the umbilicus—the only region which, as my colleague, Mr. Simon, says is unappropriated—I think I can promise him more than one patient."—*London Lancet*.

QUININE BY THE RECTUM.

Sulphate of quinia is one of those agents which produce their proper effect through the rectum, particularly in children, in nearly the same quantity as when taken into the stomach. The *Detroit Review* remarks on this subject: "In our experience, quinine will do its work just as well when mixed with cocoa butter and pushed into the rectum, as when taken by the mouth. This can be done with less trouble and discomfort than attends the swallowing of sugar-coated pill. The doctor, patients and attendants who have once tried this method of giving quinine to children and fastidious people, will be sure to remember and practice it in similar cases. There is no way equal to this for administering narcotics when the stomach is weak or the patient unwilling to take medicine per mouth."

TREATMENT OF CHRONIC ECZEMA OF THE GENITALS.

Dr. de Montmya recommends the use of tincture of iodine in the treatment of the chronic eczema, and intertrigo of the genitals, more especially combined with the use of a lotion of one part of corrosive sublimate to 250 of water, a few drops of spirit being used to dissolve the corrosive sublimate.

FRECKLES.

For the benefit of young persons afflicted with freckles, we would inform them that powdered nitre, moistened with water, applied to the face night and morning, will soon remove all traces of them.—*Druggists Circular*.

THE CANADA MEDICAL RECORD

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COLLEGE OF PHYSICIANS AND SURGEONS.

The semi-annual meeting of the Board of Governors of the Physicians and Surgeons of Lower Canada, was held on the 24th of September, in the rooms of the Medical Faculty of Laval University, Quebec, when the following officers and governors were present:—Dr. W. E. Scott, President, in the chair; Drs. Russell and Weilbrenner, Vice-Presidents; Drs. Tessier and Rottot, Secretaries, and Dr. Blanchet, Registrar-Treasurer; Doctors Jackson, Landry and Belleau, Quebec; Dr. Robillard, Montreal; the Hon. J. J. Ross, Ste. Anne de la Pêrade; Dr. Elz. Landry, Bécancour; Dr. Gilbert, Sherbrooke; Dr. Tetu, Rivere Ouelle; Dr. Marmette, Montmagny; Dr. P. Peltier, Matane; Dr. Dubé, Riviere du Loup [en bas], and Dr. Michaud, Kamouraska. The minutes of the last meeting were read by Dr. Tessier, one of the Secretaries, and approved. Motions of condolence were passed to the family of the late Dr. Boudreau, of Baie St. Paul, one of the governors of the Board, with instruction to the Secretaries to transmit them to the family of the deceased. Dr. Elzéar Desjardins, of Cap St. Ignace, was elected a governor of the Board for the Quebec district in the room of the late Dr. Boudreau. After the ordinary routine business and a discussion on the pharmaceutical education, the clinical lectures delivered at the University of Bishop's College, the number of unlicensed practitioners and several proposed amendments to the Act of Incorporation, the following gentlemen obtained the License of the College on presenting their respective diplomas:—*Laval University*,—Ernest Delisle, M.D., Point-aux-Trembles; Louis Gauvreau, M.D., St. Frederick, [Beace]; Evans Rochette,

M.D., St. Augustin (Portneuf.) *McGill University*,—H. J. Jones, M.D., C.M., Sherbrooke. *University of Bishop's College*,—Chs. F. Lawrence, C.M., M.D., Marletown. The following gentlemen were admitted to the study of medicine after passing the usual preliminary examination: Messrs. Delphis Brochu, B.A., St. Lazare; Antoine Belleau, Quebec; Pierre Blanchet, St. Jean Port Joli; Eugene Gervais, Three Rivers; Emile Lacourciere Batiscau; Thomas Casgrain, Windsor, Ontario; Chas. Vivian O'Connor, Quebec; Walter Alexander, Nicolet; George Stanislas Gregoire, Levis; Alph. Letellier, Riviere Ouelle, and Alcide Mondor, Sorel. The Board adjourned at 12.30 p.m., when the non-resident governors were entertained at the Stadacona Club by their resident confreres, the governors for the city of Quebec, amongst the other guests there being Professor LaRue, M.A., M.D. The Secretaries of the Board have been requested to take stringent measures against unlicensed practitioners and graduates of universities who neglect to take the license of the College.

NOTICE TO GRADUATES.

It appears by the report of the meeting of the College of Physicians and Surgeons, which was held at Quebec, on the 24th September, that that body intends proceeding against all graduates who are practising without its license. We hope that those who have thus neglected to qualify themselves, will without delay, notify the Secretaries, that they will present themselves for their license next May. We should be sorry to see the graduate of any University thus proceeded against, but so long as they neglect to comply with the law, they have but themselves to blame, should they find themselves unpleasantly placed. It is refreshing to notice that the College has in other matters, determined to act. We congratulate it upon its renewed vigor, and trust we may in time see the fruit.

MONTREAL MATERNITY HOSPITAL.

An Institution with the above designation has just been opened in Montreal, under the direction of Dr. Trenholme, Professor of Midwifery, and Diseases of Women and Children, in Bishop's College, the Faculty of that University being the consulting staff. Its opening supplies a want which has long been felt in Montreal, and its success therefore appears to be secured. The terms will be moderate, and the attendance and accommodation all that can be desired. The advertisement will be found on the first page of our cover.

THE NEW WESTERN HOSPITAL.

We notice by advertisement that application will be made to the Quebec Legislature, at its approaching session, for an act to incorporate the "Western Hospital" of the City of Montreal, with power to purchase and hold real estate.

OPENING OF THE MEDICAL SCHOOLS IN MONTREAL.

The University of McGill College, and the University of Bishop's College, both opened their Medical Schools on the 1st inst, the former by an introductory from Dr. Howard, and the latter by one from Dr. Trenholme. Abstracts of both of these lectures will be found elsewhere. At the time we go to press it is impossible to say anything as regards the number of student in attendance. The French Medical School (Victoria College) do not open till the 8th or 9th of October, the new building, which has been erected for them, not yet being completed.

PERSONAL.

Dr. John Madill (McGill College 1867) is located in Thornlow, County Simcoe; his friends will be able to judge of his success and the position he has attained, when we state that his name is freely discussed, as the future representative of the South Riding of Simcoe, in the Legislature of Ontario, in place of T. R. Ferguson, who is about to resign his seat.

Dr. Reeve, of Toronto, has been appointed ophthalmic surgeon to the Toronto General Hospital.

Dr. Canniff, of Toronto, owing to alledged unprofessional conduct on the part of Dr. Rosebrugh, the surgeon to the Eye and Ear Infirmary, has resigned his appointment as consulting surgeon to that institution.

Dr. Vercoe of the village of Scaforth, has been appointed associate coroner for the County of Huron.

Dr. Robert C. Blair, (McGill College, 1865) is in practice at Chicoutimi, Saguenay District, Province Quebec. We recently had an interview with him, and were glad to hear of his prosperity.

Dr. Paton has returned from Cacouna, and resumed practice in Montreal.

Dr. Belgrave, formerly House Surgeon to Sir William Ferguson, at Kings College Hospital, London, has commenced practice in Montreal.

MONTREAL:

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Original Communications.

A case of Ovariectomy. By E. H. TRENHOLME, M.D., Professor of Midwifery and Diseases of Women and Children, University of Bishop's College, Montreal.

[Read before the Medico-Chirurgical Society of Montreal, October 31st 1873.]

The patient in this case is an Englishwoman of fair complexion, rather above the medium height, of good muscular development, and very good general health. She has been in Canada about one year, is eight years married, has had no children, of regular habits of life, and by occupation an envelopemaker. She first consulted me in December last about an enlargement of her abdomen, and wished to know if she was pregnant.

Upon enquiring I found she had been ill and treated for inflammation of the bowels, in January, 1871, at which time she had severe pains all over the abdomen, but most markedly in the umbilical and lumbar regions. This attack was accompanied by constipation of the bowels and considerable nausea. So far as she can remember there was no difficulty with the generative or urinary organs. She fancied, however, that after her recovery there was more than usual fulness of the abdomen. She had always been quite regular and natural in her monthly flow, and therefore wished to know what made her so stout.

On examination, I detected and drew her attention to a large tumor occupying the cavity of the abdomen, which had heretofore escaped her notice. The tumor was exactly in the middle of the cavity, and about the size of a uterus containing a six months' fœtus. It was also freely moveable, and had never caused any pain or inconvenience. The areolæ was dark-colored, and the sebaceous tubercles enlarged. On making an examination per vaginam, found the uterus occupying a median position. The brim of the pelvis is occupied by the tumor but not bulging into the cavity of the pelvis; could detect no fœtal or placental murmur. Under these circumstances, I told her I could not give a decided opinion at the present time, but that probably she was in the family way. This state of uncertainty continued up to March, when the patient affirmed most positively that she frequently felt movements in her abdomen, which she believed were due to the child kicking. In April, the abdomen began to enlarge rapidly

and caused considerable dispnoea. In June, the enlargement was so considerable that she not only was short of breath, but was beginning to lose her appetite and growing emaciated. The menses were still regular, and as she had passed the period when gestation should have been completed, and as all positive signs of pregnancy were absent I now informed my patient that she was not pregnant, but that she had an ovarian tumor, which fact had been intimated to her months before. On 1st July she had a sharp attack of peritonitis, which, however, rapidly subsided under appropriate treatment.

In order to render the diagnosis certain, I now tried to introduce the uterine sound, but after much persevering effort failed to do so.

Dr. Hingston saw the case with me early in July, and also failed to introduce the sound. The same result attended Dr. Craik's efforts, who saw the case with me a week or two afterwards. Both gentlemen agreed with me, however, as to the diagnosis and the desirability of an early operation. I suspected the tumor was connected with the left ovary, from the fact of the patient being able to sleep with more comfort on the left than upon the right side. Fluctuation was fairly well marked. The external surface of the tumor was unequal, from which fact and its rapid growth it was believed to be multilocular.

OPERATION.

The patient being very anxious to have the operation performed without further delay, and having ordered her some lithia water to correct a slight derangement of the kidneys, and aperients to regulate the bowels, on 2nd Sept., 1873, at 3 p.m., assisted by Drs. Godfrey, Craik, F. W. Campbell, Kennedy, Gardner, and Wilkins, the operation was undertaken. Anæsthesia was produced by the administration of half a drachm of chloroform, and then continued during the operation by ether. The patient went quietly and quickly under the influence of the anæsthetics, the pulse and respiration being regular and tranquil throughout.

An exploratory incision was made in the linea alba to the extent of about four inches, the tissues below the integument being divided separately on a director till the tumor was reached, which was found to be as diagnosed. The incision was then extended upward and downward till it was about $5\frac{1}{2}$ inches long.

The upper end of the incision reached to within two inches of the umbilicus. The tumor being thus fully exposed, and some very slight hemorrhage being arrested, Well's trochar was introduced and about a pint of clear fluid escaped from a small cyst. The cutting tube was then protruded and a larger cyst entered and emptied. This process was repeated again and again till there was sufficient space gained to admit the hand, when the tumor was found to be extensively adherent throughout its upper and back part, which adhesions were, however, easily broken up, and then with the hand placed on the posterior part of the growth, the trochar was inserted into cyst after cyst till the tumor was sufficiently reduced to permit its protrusion from the cavity of the abdomen. The left fallopian tube was greatly elongated, and enlarged to the size of the little finger, and lay over the anterior face of the cyst looking very much like a portion of adherent intestine.

The pedicle, which was about two inches long and two and a half inches broad, was secured by a strong hempen ligature, made of three plies of fine shoemakers' thread, well carbolized. The pedicle was divided in the middle, and each half tied separately, when the cyst was separated by dividing the pedicle across, about one half inch above the ligatures. Slight hemorrhage from the fallopian artery took place on account of the ligatures of the pedicle becoming slack from the change of position of the tissues after division had been accomplished. Fresh ligatures were applied and cut off short near the knot, when all hemorrhage ceased. The cut surface was carbolized with the strongest fluid carbolic acid, its surface sponged to remove any excess of the liquid and the pedicle then returned to the abdominal cavity. The right ovary and uterus were found to be quite healthy, the cavity of the abdomen was carefully examined for clots or foreign bodies, well sponged out with carbolized sponges and carbolized water, and then the incision was closed by five deep sutures of the same material as the ligatures, and the superficial surface secured by four horsehair sutures, also well carbolized.

The wound was then covered with two layers of carbolized lint (previously well dried), and secured by three broad straps of adhesive plaster, passed from side to side.

A thick layer of cotton wool was placed over the whole abdomen, and secured by a broad flannel bandage, pretty firmly applied.

The patient was then placed in bed, and warmly covered up.

The quantity of fluid removed was 28 lbs.

The fluid in some of the cysts was of a pale straw color, and in others clear as crystal.

The weight of the solid cyst was $2\frac{1}{2}$ lbs., making with the fluid a total of $30\frac{1}{2}$ lbs.

The patient rallied well and gradually returned to consciousness, and complained of a feeling of soreness at region of wound. Also, had some slight chills about 7 p. m., when I placed her upon $\frac{1}{4}$ drop of Tr Aconite every half hour. Her temperature reached 99.4° the evening of operation, 99.6° on 3rd day, the same on evening of 5th day, after which it was normal. The pulse went as high as 96 on 1st, 2nd and 3rd days, after which it gradually decreased, and after 6th day continued normal.

Sept. 3rd.—Slept quietly at intervals during the night. Has less pain in abdomen. Skin acting well. Passed flatus several times during the day. Sleeps quietly by spells; frequent escapes of flatus, but complains of nausea this morning; skin rather dry. Nausea is attributed to taking some extract of beef. In the afternoon vomited freely, after which felt quite easy and comfortable. Tongue dry, has slight brown fur in centre.

Sept. 4th.—Early this morning, 4 a. m., vomited a quantity of sour fluid and bile, which gave much relief. Skin acting well—urine, which has been drawn off every 6 hours, is for first time somewhat scanty and high colored. Vomited again this a. m. at 9 o'clock. Discontinued Aconite as skin acts well, and gave Lithia water and Soda and Bismuth; also, milk and lime water. No pain anywhere. Dressed the wound and found had united by first intention (and without formation of pus), except at two points where the skin had accidentally been brought in contact with the subjacent tissue of the opposite side of wound. Tongue moist and less furred.

5th—All going well; sleeps soundly; flatus troubles by times, but is freely passed. Tongue cleaner. During afternoon husband raised a disturbance in the sick room, in consequence of which I found patient suffering from violent agitation, distressed with flatus, nausea and vomiting; gave lithia water and remained till agitation had subsided, and ordered perfect quiet. Husband repeated his antics in the

evening, but did not cause so much mischief as before.

Sept. 6th—Had a good night, although frequently disturbed by quarrelling cats. Passed her urine voluntarily about 4 a. m. Skin normal. Said she was hungry and asked for breakfast, which she was taking when I paid my first visit. Tongue clean: all well.

Sept. 7th—All well; eats well and relishes her food. Complaints of very slight pains over region of pedicle.

Sept. 8th—Sat up in bed for breakfast and dinner; all well.

Sept. 9th—Removed all sutures; union complete except at the two points already mentioned, where skin was turned into wound. All well, but ordered to keep quiet in bed.

Sept. 10th—Left off binder; all well.

Sept. 12th—10th day after operation. Patient up, dressed, and going round her room; all going well.

Sept. 13th—Moved round the house a good deal and had some pain in abdomen in the evening.

Sept. 14th—Found the two superficial small points suppurating; dressed the wound with carbolic acid, and re-applied the flannel bandage: to keep quiet,

Sept. 15th—Wound nearly closed; binder continued. All well.

Sept. 17th—Wound perfectly united. Allowed to go around freely during the afternoon.

Sept. 27—On calling to-day found patient at work envelope-making; since last visit has been perfectly free from pain or tenderness.

Oct. 27th—Has enjoyed uninterrupted good health; has been at her work for weeks past, and last week earned \$6.75. Cicatrix is about three inches long. Is quite regular in her menses and rapidly growing fleshy.

REMARKS.—There are a few points connected with this case which are, perhaps, worthy of notice. The family history of the patient is not very good as several died of pulmonary tubercle. It has also been noticed by Dr. Thomas Keith of Edinburgh, the most eminent ovariectomist living, that apparently healthy cases, are by no means more apt to recover than those who have suffered long and are much broken down by the disease. I would also draw attention to a remark made to me by the same gentleman as to the early passage of flatus being a favorable prognostication as to the ultimate issue.

This case also illustrates the advantage of using carbolized sponges, ligatures, and carbolized water for washing the sponges in during operation, also the value of fine hempen ligatures for the pedicle, and deep sutures, as well as the use of a carbolized lint pad over the wound. The fine ligature, cut off short, can do but little mischief as a foreign body, and moreover, will be readily disintegrated and absorbed.

The use of carbolized horsehair for the superficial ligatures is all that could be desired, as they do not cause the least irritation, and make a firm, safe knot. There is just one remark I would further make, and that is with regard to the size of the abdominal incision, and extraction of the cyst. The incision in this case was too small, and required very much care to prevent the cyst from acting as a valve and thereby creating a vacuum in the peritoneal cavity by which capillary congestion would be induced, and create a fresh source of danger to the patient's life. To obviate this danger, for such it is to my mind, I directed my assistants to depress the walls of the abdomen on each side during extraction of the tumor.

Victoria Square,
Montreal, Nov., 1873.

Correspondence.

A MEDICAL BLACK LIST.

To the Editor of the Canada Medical Record.

SIR.—I have no doubt but that every member of the Medical profession in this City has upon his books the names of a large number of persons who employ physicians without rendering them any remuneration for their services, charging their attendant whenever a bill for past services is presented. Many of these are fully able to pay, but from meanness or avarice never intend to do so, knowing how seldom it is that such bills are sued.

To prevent this, would it not be well for the profession to establish an index, each physician furnishing his quota of names, and these latter submitted to a committee, so that any one name appearing in three lists shall be so indexed. Objection I know would be made to such procedure, but surely we have the same right to know our own victimizers as the merchant has his would-be customers.

The Medical profession give a considerable portion of their time to the indigent, who of course are unable to pay, but the class I refer to should be

made to understand that if they are the recipients of gratuitous advice the fact will be known to those interested. The more the profession protects itself the better will it be appreciated, and if the persons who thus act were known, it would save many a thankless visit and much time. It would make such characters aware that Medical men are not so ready to run at every call, which at present seems to be the case, probably, I suppose, from being ignorant of the history of the party sending for them. Such a list would not be difficult to compile, if each would only take the trouble to furnish a list with additions semi-annually, and there is no doubt but that the profession would profit by it. A VICTIM.

Montreal, October 20th, 1873.

Progress of Medical Science.

LONDON LETTER.

Thousand-Guinea Fees—A Brilliant Career—Sir Henry Thompson—An Incident.

The Highland Lullay of our London physicians and surgeons has been interrupted by an incident productive of some rather curious illustrations of professional practice and feeling. A very well-known and wealthy man, who has many friends and personal acquaintances among consulting practitioners in London, was seized with a very severe illness at his hunting-lodge. His friend, Sir Henry Thompson, was near at hand, and was summoned. He came over at once, and, finding his friend dangerously ill, was fain to stay with him in his time of need, and began a close attendance, which lasted for nine days and nights. He was offered, on resigning the case to Sir William Jenner, who was summoned by telegraph, a check for a thousand guineas, but steadfastly refused to take any fee whatever, alleging that he had attended solely as a friend and would not otherwise have undertaken a case of the kind. This is the second time during a few months that the same surgeon has returned a check for a thousand guineas from motives of delicacy. I have mentioned in a previous letter that, knowing that the family of the ex-Emperor Napoleon were not in possession of large means, he returned a fee of a thousand guineas in that case. It is not often that the same surgeon receives fees so large as to afford the opportunity of dealing with them in a manner so splendidly liberal and delicate, and perhaps it is as rare that he should insist upon doing so. But Sir Henry Thompson is in receipt of an exceptionally large income from the successful practice of his profession, and he is a man of great decision, clearness, and liberality of mind. He is a man who has reason to be satisfied with his career, and of whom we in England have reason to be proud. Commencing the study of surgery rather late in life, and not graduating, I believe, till the age of thirty, he has by the sheer force of intellect and work won his way to the highest eminence and success in practice, to a fine fortune, a splendid social

position, and a world-wide reputation. He is still a young man, and his career has been brilliant. Nor has it involved sacrifice of other pleasures and pursuits. He is an artist of high attainments,—perhaps the best amateur in oil painting in England; his pictures are not only well hung at the most difficult and eminent of our exhibitions,—the Royal Academy,—but command a fair market price against those of professional artists, when he is disposed to part with any of them. He is an excellent writer, and a man of thoughtful habit on other than medical subjects; his paper in the *Contemporary Review* on the Efficacy of Prayer, addressed to Professor Tyndell, opened up the controversy of which the echoes reached your continent; and he has all the other accomplishments, as a sportsman, ect., which suit the character of an English gentleman. This brief outline of the elements of a singularly successful character and career is only noteworthy as affording encouragement to others, and furnishing the materials for contemporary history.—*Correspondence of the Philadelphia Medical Times.*

A TRIBUTE TO THE DOCTORS.

Mr. Gladstone was a guest at the recent dinner of the British Medical Association. In acknowledging the compliment of a toast to "Her Majesty's Ministers," Mr. Gladstone paid a high but not undeserved tribute to the medical profession. He said that but for the care and watchfulness of a succession of able physicians it would have been impossible far him to have gone through the fatigues of political life. "It is," he proceeded, "among the mournful and noble distinctions of your illustrious profession that, although its members may not receive that acknowledgment which awaits the soldier when he falls on the battle-field, yet they are to be found in countless numbers among the truest martyrs in the cause of humanity." He complimented the practitioners of the medical art on their high claims to consideration for their promotion of beneficial sanitary legislation. He said that medical knowledge has advanced in recent years in a degree which is not, perhaps, paralleled in any other profession. There is at the present day "a greater and more sustained earnestness of purpose, and a more general exaltation of the aims of medical men."

Mr. Gladstone said in conclusion, "This age is distinguished by an unbounded activity in all the sciences of observation. Of all those sciences yours is the noblest. It is given to you to study the relations between the wonderful body and the still more wonderful soul and mind of man. You tread that border land in which the two come in contact. It is very easy to describe the post-office or the railway system, but you have to deal with a thing far more subtle when you attempt to grasp human nature as a whole. Human progress is not to be described by formularies. It is only by the most patient observation that a sound and comprehensive knowledge on such a subject can be acquired. To you it belongs to seize the great opportunities and to accept the great responsibilities which attach to the profession

of which you are members, and to show yourselves worthy of the great vocation with which you are intrusted."

CLINICAL LECTURE UPON SORE NIPPLES AND MAMMARY ABSCESS.

By FORDYCE BARKER, M.D.

Clinical Professor of Midwifery and Diseases of Women in Bellevue Hospital Medical College.

Gentlemen:—All of you may obtain a great reputation by performing some important surgical operation; but the unfortunate fact with regard to such reputations is, that they are not easily secured, because opportunities only rarely present themselves for such operations; and, indeed, you may pass a lifetime in active practice without once being called upon to perform an ordinary amputation of the thigh or arm.

Your reputation, however, may be very much jeopardized, if not ruined, if you are not able to treat successfully a case of sore nipples or mammary abscess, and these are the cases you will see perhaps every week in your life. In these cases the responsibility will always fall upon the doctor, and unless he is familiar with their management the weight may prove more than he can well bear.

In text-books in general there is a sad deficiency with regard to description of the different forms of these troubles, the proper management, and the exact and appropriate treatment for each definite form.

Various articles, with which every practitioner is more or less familiar, are recommended for their cure, without any definite rules being laid down, where one or another will be applicable. These remarks apply with equal force to both sore nipples and mammary abscess. The forms of sore nipples are these: First, inflammation. This generally occurs in those cases where the nipple is naturally contracted, or in those cases, which are not at all infrequent, where the nipple is almost completely absent.

The child when placed at the breast has great difficulty in getting hold of the nipple, especially when the breast is distended, which renders the nipple still more retracted; it pulls away at it, and as a result of the irritation to the breast an inflammation of the nipple takes place. This inflammation of the nipple may by propagation pass into the lacteal ducts, and we may have mammary abscess as a consequence of that.

Second, fissure, or erosion of the nipple. These fissures of the nipple are of two forms. One comes from inflammation of the nipple, but there is another form which exists just at the base of the nipple, and gives the most intense pain and suffering, the patient, perhaps, bursting out into a profuse perspiration as the child is placed at the breast.

The next form of sore nipple is the ulceration which I have referred to in connection with the case now before you. The surface of the nipple is red, and denuded of its cuticle; the nipple is very much retracted, and in this case there is a fissure at the top. The pain is very intense, and it may be that

the woman experiences as much suffering from this as from anything else during the entire puerperal period. The process does not generally confine itself to the nipple alone, but the areola tissue around the nipple becomes inflamed, and as the inflammation becomes more intense, perhaps one-half or two-thirds of the nipple becomes entirely destroyed in the process. These three forms are distinctly and easily recognized; and now a few words with regard to the treatment of these different forms.

In the first place, for drawing the nipple out. There is a great difference among authors as regards the propriety of applying the chill to the breast immediately after the confinement has been completed, and also as to the proper time when it should be done. Some writers recommend that it should be done as soon as possible after delivery. The reason given for this early application of the chill to the breast is, that the child by nursing stimulates the breasts, which excites reflex action in the uterus, thereby producing uterine contraction, which renders the woman less liable to post-partum hemorrhage.

With reference to that point, I can say I do not consider it to be sound practice. I adopted it for some years, but have given it up entirely. You can procure uterine contraction, which will place the woman out of all danger from post-partum hemorrhage, by means which are far less exhausting for the patient than the resort to the troublesome efforts of the child at nursing. I now advise to get the woman completely restored after the fatigue of confinement before applying the child to the nipple.

The first stage after parturition is that of exhaustion. The whole effort of the system has been used to accomplish this result, and so complete is the exhaustion, that it is very commonly manifested by nervous chills. If the woman is permitted to get a few hours of sleep, her exhausted nerve-power will be restored, and then is the time to direct that the child should be placed to the breast.

The main reason for this is, the breast is not now distended, and the nipple is easier drawn out. The traction excites the more rapid secretion from the breast, and the first secretions from the breast are of great benefit to the child as a laxative, being its first proper food. It is then that the nipple can be more readily grasped by the child, and properly formed. If, however, you wait until the secretion of milk has taken place, and the breast has become distended, before applying the child, the distension itself causes obstruction to a free flow through the ducts, and the nipple and breast may become a very great source of irritation.

There are some cases in which the nipple congenitally is so short that the child cannot get hold, and it must be drawn out by some mechanical appliance. The most common method resorted to for accomplishing this is the old-fashioned application of a bottle, which has been filled with hot water and emptied, and the use of the breast-pump.

A few words with regard to breast-pumps. Most of them are constructed upon principles utterly devoid of common sense. Most of them have so small an opening in the part applied to the breast

that the nipple is constricted, and the milk cannot flow at all after the first two or three exhaustions of the instrument.

The essential requisite for an efficient breast-pump is a large bell-shaped extremity, so that the nipple is not at all constricted by the narrow diameter which is applied over it.

The pump which meets the indications most satisfactorily, and which has come to my notice, is what is called Mattson's breast-pump, and it is a most excellent instrument.

With regard to treatment of the sore nipples, the following are the rules which chiefly govern me in the management of these cases: If the nipple is inflamed, apply a poultice until the inflammation is subdued, and then apply a solution of nitrate of lead in glycerine, ten grains to the ounce. This is also the most complete and perfect prophylactic against the occurrence of sore nipple that I know of. This solution should be applied immediately after nursing, having first washed the nipple perfectly clean.

The application must also be washed off every time before the child nurses. It is almost a specific, when properly used, against excoriations and ulcerations. If the tendency is quite strong to sore nipples, the solution may be used of the strength of 15 grains to the ounce, or even $\mathfrak{z}\text{i}$; but as a rule the 10 gr. solution is sufficient. Next, where the cuticle is denuded, and we have a raw surface, or it becomes so irritated that there is a tendency to an abrasion, the indication is to form an artificial cuticle, which will entirely protect the parts, and yet permit the milk to pass through it.

For this purpose collodion has been extensively used. The objection to the collodion is this, that it contracts as it dries, and thus itself becomes a source of superficial irritation and discomfort, and does not readily permit the flow of the milk. I have used for this purpose, and with the most satisfactory results, the compound tinc. of benzoin. Wipe the nipple dry after the child has nursed, and with a camel's-hair brush apply four or five coats of this tincture.

The first application may produce some burning, but when once applied this will be entirely overlooked, and the woman will desire its reapplication. This forms a most excellent artificial cuticle, and at the same time permits the flow of milk without obstruction. Cicatrization will take place under this coating, and the patient will thank you for the benefit received. When the fissure is at the base of the nipple, very small it may be, but accompanied by the most severe and agonizing pain, the most satisfactory method of management is to touch the fissure with a fine point of nitrate of silver, and apply over this the comp. tinc. of benzoin as before.

When the inflammation and ulceration have gone on to such an extent as to destroy the surface of the nipple, and there is danger of the inflammation extending back to the mammary gland, do not allow your patient to torture herself by allowing the child to nurse. Remove the child entirely, and empty the breasts by the breast-pump or by rubbing.

I then use as an application in these cases the following:

R. Rose Ointment . $\mathfrak{z}\text{i}$.
 Carb. Magnesia . $\mathfrak{z}\text{i}$.
 Calomel, grs. . xxx.
 M.

These ingredients should be rubbed together very carefully, and it should be freshly prepared, perhaps every twenty-four or thirty-six hours. If the child is permitted to nurse at all, it should be done entirely through an artificial shield, and the best shield is one made of the cow's teat. The objection to the india-rubber shield is, that there is an offensive odor emitted from them, and they are very apt to make the child's mouth sore.

If, however, it becomes necessary to use the shields which are in the market, in selecting them get a broad base, what is called the L-shaped glass, in the same manner as in the selection of the breast-pump. The ordinary nipple-shields seen in the stores are simply abominable.

The next subject which is immediately connected with the one just under consideration, is a very troublesome complaint, viz., mammary abscess. This woman who is now before you has been confined about one month, yet it is only three days ago that she began to complain of her breast, and since that time suppuration has taken place.

This is an important point, and one which is often overlooked in the books. It will be seen that the whole surface of the gland about the nipple is inflamed, the woman had a chill, has a fever, &c., &c. This is probably one of those cases which is the effect of the peculiar poison which develops puerperal fever in some cases, puerperal peritonitis in others, and mammary abscess in others. There are three different forms of mammary abscess. First, inflammation of the cellular tissue surrounding the nipple and external to the breast; second, inflammation of the substance of the gland itself; third, inflammation of the areolar tissue between the gland and the thorax. The first form may result from irritation, and is nothing more than a pure simple phlegmon, requiring the same treatment. It usually terminates rapidly, is not attended with the constitutional shock which accompanies glandular inflammation, and is to be treated the same as phlegmonous inflammation elsewhere. As soon as fluctuation is detected, the question may arise whether the escape of the pus should be permitted to take place spontaneously, or whether the breast should be opened by the surgeon. The amount of constitutional disturbance is to decide that, and if it is decided to open it, the incision should not to be made within the areola, because the retraction which is incident to cicatrization will spoil the nipple for future use. The sooner this discharge takes place, the sooner the healing process will be completed, and the breast restored to a healthy condition.

In case the gland itself becomes inflamed, it is attended with more constitutional disturbance. There is headache, chills, fever, full pulse, high temperature, etc., and yet even greater constitutional dis-

turbance if there is a tendency to the formation of multiple abscesses. If these cases are seen at a very early period of their formation, when there is great tenderness, high temperature, fever, etc., pulse 108, perhaps 120, it may be well to try to abort the inflammation. For this purpose I give the woman ten grains of Dover's powder, with an alkali, paint over the surface of the gland with tr. of iodine, and cover it with a warm poultice or cotton padding covered with oil-silk. Empty the breast with a pump, and in most cases you will arrest the whole thing at once.

The trouble is, that the patient does not see the physician until this period has passed, and then suppuration must be favored by poultices. Internally the patient must be ordered as full doses of quinine as she will tolerate.

As soon as fluctuation is detected, open the breast at the lowest point, because otherwise pus will burrow between the tissues of the gland, become a source of irritation, and produce another inflammation.

The third form is called the sub-glandular, and is attended with greater constitutional disturbance. It has none of the external redness present in the other forms, because it is situated between the gland and the thorax.

The gland sometimes becomes very prominent. The inflammation is attended with intense, severe pain, rigors, chills, and yet upon the external surface there may be no special intimation of its existence. The most significant symptoms are that the patient complains of difficulty of breathing on account of pain produced, and, when present, the prominence of the gland. These cases are generally exceedingly tedious, and sometimes dangerous, because the inflammation is so deep-seated that the pus between the gland and the thorax burrows about, forming sinuses and extensive fistulous tracts, which may be exceedingly troublesome and exhausting from the profuse discharge and constitutional irritation which is produced.

My hour has already passed beyond its limits, and further remarks upon this subject must be postponed until some future date.—*N.Y. Medical Record.*

CLINICAL LECTURE ON CHRONIC CORPOREAL ENDOMETRITIS.

By F. H. GETCHELL, M. D., Clinical Lecturer on the Diseases of Women and Children in the Jefferson Medical College.

GENTLEMEN,—We had before us this morning Miss B., aged 23, by trade an artificial flower maker, and by listening attentively to the history of her troubles, and by a series of questions, we learned from her that she had been out of health for the last three years.

Her first complaint was of her monthly sickness. She told us that she menstruated regularly as to the time, but that the discharge was of only one or two days' duration, the amount very scanty, and the pain excessive. She said the pain began two days before the menstrual discharge, and continued some hours after it had stopped, but that it was somewhat

less severe after she began to menstruate than for the two days before.

You remember she told us that she was obliged to keep her bed from one to three days each time she was sick, and that her mother gave her "gin and tansy, hot water and mustard foot-baths, and opened her bowels with castor oil," and although she experienced some relief from this treatment, her sufferings were still very great, and after it was over she lived in anticipation of the agony she knew she must go through the next month. She has headache sometimes in the afternoon, but is not very much troubled with it. She is annoyed with indigestion to some extent, and her bowels are constipated. She has more or less pain all the time in the lower part of her back, and it fatigues her very much to walk, and the back ache is much worse after a long walk or any unusual exertion. In fact, she said she felt tired most of the time, and were it possible for her to follow her inclination she would lounge about the house for the entire day.

On examining this patient with the finger, speculum, and uterine sound, we found, with the exception of a slight whitish discharge exuding from the os, that part of the uterus to be seen through the speculum to be in a normal condition. When making the digital examination, if we pressed the cervix against the walls of the vagina it gave her no pain, but if I placed one hand above the pubis and with two fingers in the vagina compressed the entire uterus, she complained of great pain. On introducing the sound it met with but slight obstruction at the os internum, and caused no pain until the end of it was pressed gently against the mucous lining of the uterine cavity; but this gave her great pain when it touched the sides or fundus. The withdrawal of the sound was followed by a slight discharge of bloody mucus.

She complains of a leucorrhœal discharge that she has most of the time, but which is more profuse just before, and just after, her menstrual periods.

You will remember that at our last lecture I told you that inflammation of the parenchyma of the uterine neck was the most frequent uterine disease among women that had borne children; and I now tell you that I believe the case I bring before you to-day—which is chronic inflammation of the mucous membrane of the uterine cavity—to be the disease of the uterus oftenest met with in unmarried women, and in married women who have never been pregnant.

You will often be asked, Why do unmarried women have womb disease?

There are a variety of causes given in your books that may bring a woman to this unfortunate condition; but instead of consuming time in going over the long list of possible causes, let us look for a moment at the most frequent or principal cause,—namely, imprudence during menstruation,—and see if we cannot convince those who think there is no reason why an unmarried woman should have uterine inflammation that they may be mistaken. You heard me question the patient with regard to her habits of life before she was troubled as she now is; we asked

her if she made any difference in her clothing, or took any less exercise, while she was menstruating. She said she did not; and then by questioning her we found that, as she was obliged to work through the day, night was the only time she had for recreation; and she told us that she was in the habit of attending several public balls every week during the fall and winter; that she made no difference during the week she was menstruating, but dressed herself in thin clothing, went to balls, and danced till a very late hour, often reaching home, after a long walk through the snow, with draggled clothing and wet feet.

It is not among the lower classes only that you will find imprudence during menstruation, and its unfortunate results, but you will often be called to attend the daughters of indolence and luxury. Not only is their entire life an unnatural one, but they too go to parties while menstruating, dressed in a ridiculous fashion, and remain standing for hours in overheated, badly ventilated rooms, then adjourn to the cooler hall, or to a seat on the stairs in a direct draught, for a chat with a young man who waltzes exquisitely and displays his classic brow to the best advantage by parting his hair in the middle. I need not tell you that tight lacing has anything to do with uterine disease, for all the women in this country wear their clothing very loose. If you think this is not true, why, ask your first young lady patient that you suspect of lacing tightly, and after a full explanation she will, by contracting the muscles, draw in her abdomen, and then run her hand under her corset, and say, "Look there!" when, if her corset laces were to break, the explosion would be equal to the popping of a bottle of soda water; and when this young lady gets out of bed in the morning, her maid will tell you that the corset marks of the night before can be plainly seen about her waist.

Cases of internal metritis do not all present the same symptoms; while the menstrual discharge is generally scanty and of short duration, there are cases in which the discharge is profuse, and continues for a longer time than in health. Some of the patients suffer much more than others. You remember we had a young girl before us at our last lecture, who told us she had had a convulsion every time she menstruated for the last thirteen months. Females who suffer in this way are often hysterical, and most of them are exceedingly nervous. The pain in the back is rarely absent, and sometimes is very annoying; and they all have more or less leucorrhœa.

To relieve the intense pain at the menstrual period I think you will find it best to give the patient full doses of morphia at once. I am in the habit of giving a pill composed of one-fourth of a grain of sulphate of morphia, one grain of camphor, and two grains of the extract of hyoscyamus; but it is from the local applications made during the absence of the catamenia that you expect permanent relief. Although general medicinal treatment alone is powerless to subdue this disease, you must not neglect to avail yourselves of so powerful an accessory to the local means employed. You will find among all

classes that hygienic laws are daily violated, and you must include in your treatment of these cases not only such medicines as in your judgment are required, but you must not fail to give such dietetic and hygienic directions as may be required to improve the general health of the patient.

The reason the so-called local treatment of this condition is so often unsatisfactory is not that the disease is incurable, but that there has really been no local application made. There is no doubt that many of these patients have had a stick of nitrate of silver passed up the cervical canal time after time, and, while that may be proper treatment for cervical endometritis, it is worse than useless if it is the mucous lining of the cavity of the body of the uterus that is inflamed, for none of the application goes above the os internum. Now, as you all know that the distressing symptoms of inflammation of the lining of the cervical cavity are relieved by alternative applications, the fact that I desire to impress upon your minds to-day is that the inflammation of the mucous lining of the cavity of the body of the uterus will disappear just as surely if the proper remedies are applied to the parts diseased. The first step in the treatment is to dilate the cervical canal; this may be done at once by the uterine dilator, or by the slower action of the tent. Although a little time is lost by using the tent, it is by far the best method, and the only one I recommend you to employ in the treatment of these cases. The sponge-tent is perhaps the best, provided you can introduce it without difficulty; but, as it must be passed through the internal os, the resistance met with at this point is often considerable, and for this reason I have found the laminaria-tent, on account of its firmness and small size, much easier to introduce; and as the amount of dilatation required is not very great, I advise you to use it if you find any difficulty in introducing the sponge-tent. Having dilated the cervix, you introduce the vaginal speculum, and with a wisp of cotton twisted around the end of a probe remove the mucus from the uterine cavity; then with a sable brush you paint the entire cavity with the alternative you have selected for the purpose. Nitrate of silver is highly recommended; but, while I prefer it for cervical endometritis, I very seldom use it above the os internum. I have invariably been disappointed with it in the treatment of internal metritis, while with iodine I have had every reason to be satisfied. The formula I use is:

R. Potass. iodidi, ʒ ss;
Iodinii, Div;
Glycerinæ. ʒj. M.

The application may be made every eight or ten days; it gives but little pain, and the patient is required to keep her bed but one day. The length of time required to relieve these patients of course depends very much upon circumstances; while some will menstruate without pain after a few applications, others will require treatment for a much longer time before relief is experienced, and in some cases you will be obliged to resort to more powerful applications. After applying the above a number of

times, if there is no improvement, I then use nitric acid; there is no danger in applying this powerful caustic to the uterine mucous membrane; at any rate, I have often applied fuming nitric acid without the slightest bad effect, and its remedial power in these cases is remarkable. In using the nitric acid, care should always be taken to protect the cervical canal; this may be done by passing the probe, with the wisp of cotton saturated with the acid, through a glass tube, a piece of a large sized gum catheter, or through the ordinary uterine speculum. The nitric acid should be applied at longer intervals, and the patient must remain at rest in the horizontal position till all fear of inflammatory action has passed. It may appear singular to you that an inflammation of a mucous membrane alone should remain for so long a time and cause so much discomfort, and also that the parenchyma is not involved; but if you will recall your anatomy for a moment you will remember that the lining membrane of the uterine cavity is totally unlike the mucous membrane that is found in other parts; so thick is it that it makes up nearly one-fourth of the uterine wall, and when once it becomes the seat of chronic inflammation, there is little or no hope that it will subside spontaneously.—*Philadelphia Medical Times*.

PATHOLOGICAL DENTITION.

BY JAMES W. WHITE, M.D.

Dentition, though a physiological process, is nevertheless recognized as a frequent cause of constitutional disturbance. Doubtless there are extremists who overestimate the average influence of this process as a disturbing element, as there are those who underestimate the difficulties which may attend it. Pathological dentition is by many considered a secondary affection,—a single link in a chain of deranged actions,—and, even when a little patient indicates unmistakably the local irritation, relief is sought by general medication,—relaxants, derivatives, calmatives, febrifuges, etc.; then by local emollients, fomentations, and anodynes; and lastly, if at all, by lancing the gums, when redness, tumefaction, induration or the whiteness of the coming tooth seems to demand it. These signs are indeed assumed to be the only possible justification of the operation. If the gums are tumid, tense, and shining, swollen up into a kind of little tumor over a particular tooth; if an unhealthy ulceration with a sloughy appearance forms upon the summit of the gum; then, say our textbooks and writers upon the diseases of infancy,—*then* we may sometimes resort to incision of the gum.

"In forming a diagnosis," says one of the highest authorities, "whether a disease present during the time of teething is consequent upon some derangement of this process, or upon an abnormal condition of some other organ or organs of which the dental difficulty is but itself a symptom, the state of the jaws must be the principal guide. If, in the presence of symptoms which might arise from teething, we find that the teeth are not pressing forward towards the surface of the gums, and that the latter maintain their normal appearance, it will be useless to have

recourse to the gum lancet." Young practitioners are cautioned, by a recent writer, not to display their ignorance by the use of the lancet, except the *local* indications imperatively demand it. The local signs, it is to be inferred, are tumefaction, redness, induration, ulceration, and the whiteness of the presenting tooth. The direct pressure upon the fibrous tissue is thus assumed to be the cause of the various and serious complications which are too frequently associated with the period of the primary dentition. It is doubtless true that a hyperæmic condition of the gums may be caused by the growth or eruption of the teeth proceeding more rapidly than does the absorption of their integumental covering, and that the undue pressure thus caused may occasion trouble, by the irritation of the nerves of the gum-tissues,—manifested locally by tumefaction, soreness, redness, or ulceration; systematically, by fever, irritability, sleeplessness, etc. It is also admitted that judicious treatment of pathological dentition should in all cases include hygienic care, and that constitutional medical, as well as local surgical, interference is generally demanded. Nor is it claimed that in the perversion of this physiological process is to be found an explanation of all the ills to which human infancy is heir; but we assume that pain so intense and unrelenting as to destroy the appetite for food, to cause wakefulness, irritability, thirst, fever, diarrhœa or constipation, congestion, convulsions, and death, may be due to the irritation of dentition *without the existence of a single local indication*. In other words, that the most serious complications of dentition are not caused by the pressure of the advancing tooth upon the gums, but by the backward pressure of the resisting gums upon the developing and sensitive *pulp*, giving rise to a true toothache, comparable only to that exquisite torture which is experienced in after-life from an exposed and irritated pulp.

If such a condition of things is possible, it will readily be seen that there can be no question as to the extent of the mischief which may result. The association of the fifth pair of nerves, which supplies the dental filaments, with the great sympathetic, so connects the teeth with the entire economy that the pathological bearings of such deranged action may not be limited. That such a condition may exist will be readily understood, if it is remembered that at the period of eruption the roots of the teeth are as yet incomplete; that instead of the conical termination and minute foramen which characterize perfected teeth, the aperture is quite large, and its edges thin and sharp. In estimating, therefore, the amount of constitutional disturbance which may result because of a want of accordance between the eruption of a tooth and the absorption of the superimposed tissues which impede it, we may imagine the sensitive pulp, made up of arteries, veins and nerves, in a condition of irritation from augmented vascular and nervous action,—a morbid activity of the process of dentition—followed by determination, stasis, and congestion, producing a hyperæmia sufficient to cause the protrusion of the mass from the incomplete aperture of the root; which, being pressed upon by its thin, sharp edges, is sufficient cause for any amount of consti-

tutional disturbance of which it is possible to conceive.

Under such circumstances it is not difficult to comprehend the inefficacy of any or all hygienic measures; of relaxants and febrifuges; of local emollients and anodynes. It is also easy to understand how the thorough lancing of the gums, over the tooth or teeth thus situated, may, by removal of the pressure, give a relief so immediate and complete that there shall be no room for doubt as to the correctness of the diagnosis.

The general indications of what may not inaptly be termed infantile odontalgia are precisely what might *a priori* be expected. The child, at first simply uneasy, becomes by rapid stages fretful, troublesome, peevish, cross, vindictive; cries persistently, or stops crying only to scream; or, if quiet for an instant, will be found to have its thumb or fingers thrust between the jaws, the chewing upon which seems to afford a momentary cessation of anguish, but only momentary. It refuses food, throws down its toys if handed to it, as though in a passion, and is outraged by any attempt to amuse it. To these persistent unmistakable evidences of irritability are added a flushed face, corrugated brow, compressed lip, intolerance of light, and disturbed, broken sleep, the desire and effort to sleep seeming to be thwarted by fresh accessions of pain, until the little one sinks exhausted into a troubled slumber, but of short duration. Concomitant with these manifestations, or quickly succeeding them, will be some of the various systemic complications, too frequently with fatal ending and still *no local indication* of the trouble which is consuming the young life.

A case recently under the care of the writer afforded a marked confirmation of these views. A child one year of age, with the four superior and two inferior incisors in position, after three weeks of restlessness, wakefulness, loss of appetite, fever, paroxysms of pain, and rapid emaciation,—all without obvious cause, certainly without the slightest local indication of trouble in the mouth,—was cured by free crucial incisions over the molar teeth, the improvement being so evidently the result of the operation that the relation of cause and effect was plainly recognized by every member of the family.

Such cases are not exceptional, and suggest a more careful investigation of the developmental processes of dentition in otherwise unexplainable diseases of infancy.—*Philadelphia Medical Times*.

CLINICAL MEMORANDA.

LACERATIONS OF THE PERINEUM.

An Extract from Dr. WM. GOODELL'S Report on Obstetrics. Translations of the Medical Society of Pennsylvania, June, 1873, just published.

In the treatment of lacerations of the perineum, the utility of the immediate closure of the wound is becoming more and more appreciated by the profession. The loss of every fibre of muscle in the perineum entails a corresponding loss of power in the floor of the pelvis, and a consequent impairment

to the reproductive organs. The sustaining power of the vaginal column depends upon the integrity of its perineal abutments. It is the tonicity of the vaginal walls, and the pelvic connections of the womb that mainly keep that organ in place. These, in a case of torn perineum, may not at once yield, but will sooner or later; for air gains access to the womb, irritating and congesting it to such a degree that it will ultimately prolapse from an acquired hypertrophy. Unless, therefore, the laceration is simply cutaneous or very slight indeed, it should not be left to nature. Further: it is far more rational to take advantage of the necessary confinement in bed after delivery, and to close the wound at once while its edges are fresh and the maternal soft parts are comparatively numb and insensible, than to postpone the operation to a time when the woman shall be nursing, when the cicatrized parts shall demand quite a formidable operation for their denudation, and when a special confinement in bed for two or three weeks will be needed.

Our own method is, immediately after the delivery of the placenta to pass deeply two or more wire sutures, securing each one by merely twisting its ends together. In bad rents, the first stitch is entered half an inch below the lower angle of the wound. When the sphincter ani is torn, the cutaneous points of entrance and of exit of the needle should then be on a level with the lower margin of the anal orifice. This purses up the tissues from below upwards and secures complete coaptation. Enough opium must be daily given to keep the bowels bound for a week.

On the eighth day, as recommended by Dr. D. H. Agnew, teaspoonful doses of castor oil are given every four hours until an inclination to go to stool is urgent; when an injection is given to liquefy the contents of the lower bowel. In severe lacerations the woman's knees must be kept bound for a week, and her urine drawn off for three or four days. On the third or fourth day—but not earlier, lest the process of immediate union should be interrupted—vaginal injections of weak solutions of carbolic acid or of the permanganate of potassa are made twice in twenty-four hours. Our own rule, with regard to the sutures, is to remove each one as fast it becomes loose without reference to any special time. This method of treatment both in the immediate operation, and in the secondary operation after the cicatrized parts are denuded, we can warmly recommend, as we cannot recall a case in which we failed to secure a very good union of the parts. It should, however, be stated, that in secondary operations, we always use superficial sutures between the deep ones, and clamp the latter with shot, following essentially the plan laid down by Dr. Agnew.

From our own experience, and from what we have seen of the practice of others, we have long been convinced that the forceps is the common cause of most of the severe lacerations of the perineum. Even in comparatively easy cases, an instrumental delivery of the head will often occasion an unseen rent in the mucous surface of the vagina, which the passage of the shoulders extends through the peri-

neum. In the American Journal of the Medical Sciences, January, 1871, p. 77, we used the following language: "Delivery by the forceps, even in skilful hands, will often produce laceration; for the head is liable to be brought down too quickly upon the unprepared soft parts, and it becomes a very nice point indeed to determine the exact moment when delivery may be ended with impunity. The most cautious physician is liable to be caught, as it were, 'on the centre.' He sees the perineum stretched out to the thinness, and the fourchette almost cracking under the strain. In doubt whether the moment has arrived to raise the forceps handles and turn out the head, or to depress them and thus restrain its advance, he wavers, and in a twinkling the fibres part. On the other hand, the impatient physician is tempted to turn out the head before the parts are sufficiently dilated. Finally, what is still more frequent, *hinc mihi lachrymæ*, at the last moment the physician's courage fails him, and he depresses the forceps handles just as the head has begun to emerge; a course equally fatal to the integrity of the perineum." More than two years has elapsed since the above was written, but this enlarged experience has served to confirm us in the opinion that, other things being equal, as soon as the perineum is well distended, the forceps should, as a rule, be removed, unless the withdrawal of the blades requires a force which might hasten the delivery.

This opinion is, we are glad to find, entertained by Prof. Olshausen, who gives the same advice that we have given, and for the same reason (*Sammlung Klinischer Vorträge von Volkmann* No. 44, 1872). Dr. T. Addis Emmett also contends that a bad laceration of the perineum "is the result generally of instrumental delivery;" whilst as early as the middle of the last century, Abraham Titsingh, of Amsterdam—*acris homo et litigiosus*, as Haller calls him—pointed out this tendency of the forceps to injure the perineum. As an additional warning, we may mention the fact that, not very long ago, a well known accoucheur was dismissed from his attendance upon an imperial family, because such an injury had happened to one of its members, whom he delivered with the forceps.

LIME-BATHS IN MEMBRANOUS CROUP.

In the *Chicago Medical Examiner* of August 15, Dr. John Bartlett commends the following method of using lime-baths in membranous croup:

"Having formed a small enclosure by covering a clothes-horse with sheets, or by taking advantage of the favorable relation of a door to the corner of a room, so as with bed-clothes to close in a suitable space, the preparations proceed as follows: To one side of the tent, on a piece of old carpet, is placed a small tub; in it is put a common wooden bucket, one-quarter filled with boiling water; at hand is a supply of unslacked lime, and a kettle of boiling water. The nurse and child, or the child alone, if of such age as to remain without an attendant, take position towards the middle of the enclosure, the face of the patient being turned from the tub; by

raising the sheet, several pieces of lime, as large as the fist, are placed in the bucket; after a few minutes the evolution of the vapor begins. The physician, through that fold of sheeting forming the door of the tent, frequently takes a view of the steam within, estimating its density by the sight, taste, and smell. It is impossible to indicate the proper degree of this density. I should say it should be somewhat less than that of the cloud of steam escaping from the exhaust-pipe of a steam-engine. The smell and the taste of lime should not be too pronounced. The nurse should be instructed to give notice if the steam or heat oppress her, so as to produce a feeling of faintness, sense of suffocation, or irritation of the air-passages. Should the vapor be deemed too dense, its intensity may be diminished by opening the flap of the enclosure, or, if need be, by withdrawing the bucket. The pulse of the patient should be noticed from time to time, in view of the possibility of exhaustion supervening, an event said to have occurred in the practice of some physicians. More lime and hot water may be placed in the bucket as required. The tub is intended to receive any overflow from the bucket, which in prolonged cases, will require to be emptied."

He further says, "The *modus operandi* of the agent is uncertain; of course, the simplest theory is that it dissolves the false membrane. Some, as Drs. Meigs and Pepper, refer all benefit from its use to the heated steam evolved. Dr. J. L. Smith suggests that the lime-bath may be an improvement on the steam-bath in this, that in the latter, on account of the necessity of keeping the room closed, the air soon becomes charged with exhausted carbonic acid, whereas in the former the expired acid is speedily destroyed by the vaporized lime. May it be possible correctly to extend this idea of Dr. Smith's? Thus the dyspnoea is in great part a result of the inability of the respiratory organs to relieve the blood of its carbonic acid. By using air, as in the lime-bath, charged with a chemical having a remarkable affinity for this acid, may it not be that the pulmonary interchange of gases is advantageously supplemented?"

"I have knowledge of four cases of membranous croup treated by lime; of these, two were speedily relieved. In a third, recovery ensued, though the lime-baths were abandoned for the potash treatment, when the child, though very near death, was thought to be a little better. In the fourth case, the disease had existed one week before medical treatment was sought; an indifferent article of lime was inefficiently used for a time; death resulted. In the last two cases, relief was afforded by the baths; and although they were finally abandoned in one case, and imperfectly used and neglected in the other, there was, in both instances, reason to question the curative power of the agent. In none of these cases was the lime used to the exclusion of other remedies. So far as observed, however, improvement was in no wise referable to the medication.

"This mode of treatment is useful in those cases in which the attendant is uncertain of his diagnosis; in which, while he believes he has to do with a case

of simple laryngitis, he fears membranous croup. In such instances the lime-bath relieves the distress of the patient, and tends to quiet the anxiety of the practitioner, seeing that he is treating the apprehended disease with no danger of injury to his patient from the *nimia cura medicæ*.

TREATMENT OF OBSTINATE CONSTIPATION.

Dr. Macario, of Nice, in a communication to the *Lyon Medical*, observes that in treating constipation most practitioners confine themselves to enemata, laxatives, or more or less irritating purgatives, which in point of fact rather aggravate than cure the affection. He therefore wishes to make known what he says may be truly termed a "heroic" remedy, which he has employed during twelve years with such constant success that he cannot but regard it as infallible.

Constipation, as every one knows, may be produced either by intestinal excitement with deficiency of secretion (nervous constipation), or in consequence of deficient contraction of the muscular coat of the intestine. Here it is produced by atony or intestinal indolence, which bad anti-hygienic habits have induced and keep up. The prolonged contact of the fæces with the rectum blunts the sensibility of the mucous and muscular tissues, and the synergical contraction of the upper portions of the large intestine either does not take place or does so in an insufficient degree, constipation being the result. In nervous constipation the following pill should be given: Pure sulphate of iron, ten centigrammes; Socotrine aloes, five centigrammes; atropine, from one-third to one-half of a milligramme. In the atonic form, for atropine one centigramme of powder of nux vomica may be substituted. By the aid of these pills regular stools may be procured, even in the subjects of obstinate constipation due to *ramollissement* of the brain and chronic myelitis with paraplegia. Dr. Macario gives from one to three pills immediately after dinner, the object being to produce one easy, natural, non-diarrhæic evacuation. If more than this is effected, the dose is to be diminished, one or two pills sufficing in most cases. The use of these "antistypic" pills ought not to be continued indefinitely, a longer interval being allowed to elapse between their administration in proportion as the constipation diminishes, it being of importance to allow the organs to resume their spontaneous action without any auxiliary. If the constipation returns, the pills can be again had recourse to.—*New York Medical Journal*.

EFFECTS OF SENNA ON THE URINE.

At the last meeting of the Paris Therapeutical Society, Professor GUBLER drew attention to a curious property in senna of colouring the urine in a peculiar manner. The urine of persons who have taken senna becomes of an intense yellow colour with a green reflection, just like the urine in jaundice; but nitric acid shows that bile has nothing to

do with this colouring. If a fragment of caustic potass be let fall to the bottom of a tube containing urine charged with senna, a magnificent purple colour is produced; but nothing of the sort takes place under the influence of potass in icteric urine. This colouring has been observed in all the patients who have taken senna whose urine has been examined—even where only half an ounce of the infusion or a black draught of the Codex has been administered. Urine loaded with senna is incapable of assuming the variable rose colour under the influence of nitric acid which normal urine always assumes. Infusion of senna itself treated with caustic potass assumes, to a certain extent, the purple colour. But the phenomenon is here far less marked, and M. Gubler believes that in this case a process goes on similar to that which occurs in relation to asparagus, turpentine, copaiba, etc.—a certain amount of oxidation taking place in the economy for the production of the peculiar odour of asparagus or the violet odour. With rhubarb M. Gubler produced a much less intense colour than with senna; but he suspects that the phenomenon in both cases is due to the chrysophanic acid, which is common to both the substances. After the absorption of the senna, the colouring of the urine may persist, even to the next day. M. Gubler observed that for the detection of bile in the urine he always employs nitric acid, which he thinks is far preferable to iodine. He referred also to a peculiar colour of the urine often met with in severe diseases, furnishing a *feuilles mortes* colour, which may be easily mistaken for biliary colouring. The colour is really due to the superposition of a blue colour on the yellow; and at his clinic M. Gubler has often shown this blue colouring, which he has named provisionally "urinary indigose." On isolating it by ether, he renders the liquid clear by bringing to its upper part a ring of a beautiful blue colour.—*Med. Times and Gaz.* Aug. 30, 1873.

FRACTURE OF THE CLAVICLE TREATED BY PLACING THE ARM BEHIND THE BACK.

A patient was recently under M. Broca's care, who had fractured his left clavicle by a fall, near the middle of the bone. The fracture was oblique, from above downwards and from without inwards. The fragments riding over one another to a considerable extent. Various plans of treatment were tried, but without effecting permanent reduction into a good position. At length, calling to mind a communication made last year by Dr. Michel to the Société de Chirurgie, M. Broca placed the limb in a semiflexed position behind the back, when the most perfect confluence of the fragments occurred. The arm was fixed in this position by a bandage, and kept in it for eighteen days. At the expiration of this time the bandage was removed and the arm set at liberty. When it was found that the parts were sufficiently consolidated to prevent any likelihood of displacement, the limb was brought forward and kept immovable in a sling for a few days longer. This method of treatment has been regarded as excessively painful, but in this instance the patient

only complained of the inconvenience and pain for the first twenty-four hours. At the same time it must be stated that he was a man of considerable nerve. Immediately after his entrance into the hospital, he several times raised the hand to the head, giving fresh demonstration of the possibility of movement with fractured clavicle. The result was so good, says M. Broca, that had the patient been a lady, she might have worn a low dress without any disfigurement being observable. The proceeding of placing the hand behind the back in the treatment of fractured clavicle is not quite new, for M. Grout is cited by M. Malgaigne as having adopted it. M. Broca does not think this plan applicable to all cases, since it compels the patient to sleep on the opposite side; but he agrees with Malgaigne in believing that in some fractures of the clavicle, the broken ends of the bone can only be brought into a position by placing the upper extremity in special and peculiar positions, which may be quite different in different instances.—*London Practitioner*, Aug., 1873.

CHLORATE OF POTASH AND GLYCERIN INJECTIONS IN CHRONIC DYSENTERY.

Dr. Theodore Mead advocates the injection in chronic dysentery of half a drachm of chlorate of potash rubbed up in half an ounce of glycerin and mixed with three to four ounces of warm water. This should be thrown into the bowel thrice daily, and should be retained as long as possible. He gives two cases as illustrative of the results of this plan of treatment.

1. A young man, æt 27, was first attacked with dysentery in 1861, and had never been rid of the disease, or had a natural stool, up to June, 1868, when he came under notice. He was then having twenty to thirty stools in the twenty-four hours; was weak and anæmic; muscles atrophied; skin dry; pulse weak, and his general appearance indicated approaching dissolution. The use of opium and whisky, which had always been ordered him in large quantities during the whole of his sickness, was at once prohibited; he was given quinine, iron, strong beef-tea, and forty grain doses of subnitrate of bismuth suspended in mucilage. The injections were at once commenced, and at first gave him intense pain and rejected as soon as thrown up, but a decided effect was produced. In a short time the unpleasant sensations subsided, and in a few days he could hold the injections an hour. In twelve days his stools were reduced to eight or ten in the twenty-four hours, and were almost free from pus and mucus. In three months he was able to resume daily work, and has continued it ever since, with no return of his dysenteric troubles.

2. In the second case the dysentery followed an attack of bilious fever, was very obstinate, resisted all the ordinary remedies, and brought the patient to the verge of the grave. The treatment was substantially the same as in the other case, and recovery was complete in two and a half months.—*New York Medical Journal*, Sept., 1873.

RECENT THERAPEUTICS.

An English contemporary gives, the following therapeutical summary.

Carbolic Acid has been praised in prurigo and pruritus, subcutaneously injected in doses of about one centigramme of the acid mingled with water. It has been used externally in acute articular rheumatism as a liniment mingled with linseed oil.

Arsenic has been recently recommended in cases of strumous enlarged glands of the neck, and also in pellagra.

Bromine.—Inhalations of bromine have been used in croup and diphtheritis; 30 centigrammes of bromine, 30 of bromide of potassium, and 150 grammes of water are combined in a lotion: and a sponge imbued with this fluid is placed before the patient's mouth for five or ten minutes every hour.

Bromide of Iron is employed by some in cases of spermatorrhœa and involuntary seminal emissions, in doses of fifteen to twenty-five centigrammes occasionally; and, before the patient goes to sleep, in a dose of fifty centigrammes.

Bromide of Potassium has recently been used in cases of the sickness of pregnancy, and in cases of leucorrhœa, effecting cure in less than two months in the latter case. It is useful in summer diarrhœa in infants, in doses of three centigrammes every two hours.

Bromide of Sodium has a similar efficacy to that of bromide of potassium in epilepsy, and proved a cure in one case of tetanus.

Coffee has been given in infusion in cases of infantile typhus fever.

Conium has been used successfully in cases of mania, accompanied by muscular agitation. It acts on the motor centre, sparing the sensory tracts. Of twenty-five patients treated by this substance, twenty-two times the muscular agitation subsided.

Hydrate of Chloral has been used in cases of nocturnal incontinence.

Chloride of Potassium has been used instead of bromide in epilepsy, and it is asserted to be more efficacious. Dose 3.50 grammes to 5 grammes a day.

Copaiba has been recommended in certain cases of psoriasis.

Iodine has been recommended in cases of nocturnal incontinence of the aged; one drop of the tincture every hour in water. The tincture has also been recommended in doses of ten drops in intermittent fever thrice daily.

Iodoform is used in chronic venereal ulcers, and much praised as an antiseptic.

Iodide of Silver is recommended in whooping-cough.

Koussine is an excellent vermifuge, and is given in the morning in doses of 1.25 grammes in a little syrup.

Phosphorus in oil has been recommended in chronic skin diseases; or gelatine capsules containing each from two to six milligrammes of phosphorus in oil. Aene indurata, lupus, psoriasis, and scrofulous skin diseases have been cured by such means.

ON CONTINUOUS DISCHARGES AFTER DELIVERY.

Dr. A. Wiltshire says that these discharges are most common among patients of the poorer class, who are, by the exigencies of their lives, obliged to rise too soon from the lying-in couch, and who are, moreover, as a rule, sadly under-fed, not only at and during childbirth, but before and after. More rarely are they met with in higher ranks of society, chiefly in constitutionally delicate women, or in persons who have become weakened by too rapid child-bearing, or other debilitating causes. All classes alike are apt to blame their medical attendant for the persistence for some time of sanguineous discharges, in the belief that they are due to negligence or want of skill on his part.

The cause of this condition is due, in the great majority, if not in all, cases, to subinvolution of the uterus.

Involution should progress equally in every part of the womb, so that at the end of the process the normal relative proportions should be maintained; especially does this apply to that portion corresponding to the placental site where the uterine wall is thicker than elsewhere. It is here, however, that the process most often fails, leaving a surface prone to blood and other fluids; and it is here, the author believes, that the persistent "colored shows" and "waters" mostly originate.

These cases are characterized by the persistence, with it may be occasional remissions or intermissions, of a sanguineous (red or greenish) flow, which sometimes weakened the patient to the extent of interfering with lactation. Subinvolution is liable to persons affected with heart disease and chronic diseases which are accompanied with marked congestion of the venous system, as chronic bronchitis with emphysema, congestive liver diseases, etc. Feverishness hinders involution, and Joulin says the process does not actively set in until the pyrexia due to the establishment of lactation has passed away. It is, therefore, important to arrest all pyrexial complications. As regards the constitutionally feeble, in whom all vital processes are slow, absorption and restitution are not likely to progress very rapidly when the debility, which is normal to such persons, is intensified by the exhaustion of parturition, and the usual insufficient or improper diet to which lying-in women are commonly condemned. For such is a liberal diet especially useful.

Bi-manual palpitation and measurement show in these cases excessive bulk. Ordinarily this co-exists with increased length, but cases have been noticed in which the length of the axis was normal while the uterus was broader. On the relation of flexion and version to this condition Dr. Wiltshire does not lay much stress, remarking that "such accidents do occasionally complicate these cases, and aggravate them considerably."

Under the head of preventive treatment the writer impresses the necessity of prohibiting too early rising, and next regulation of the diet, the quality of which should be inversely proportionate to the quantity taken, due regard being had for the existence of

fever, as determined by the thermometer, the habits and inclinations of the patient, and her intention to nurse the child or not.

Under the head of curative treatment he recommends the recumbent position, a firm bandage to the lower belly, and rich diet. Occasionally cases are seen in which there is an excess of nutrition, and subinvolution disappears under a regulated diet, potash or lithia, and aperients, and anti-rheumatic remedies in patients of that diathesis. Ergot is recommended, and digitalis and strychnia in some cases complicated with heart lesions. Very striking results have followed the use of quinine, as suggested by Monteverdi. Gueneau de Mussy, at the Hôtel Dieu, has of late used it with considerable success in eight grain doses for atonic menorrhagia.

Some patients, when nutrition appears to have failed seriously, improve wonderfully under arsenic. Anodynes, especially opiates, should be sparingly used. Syrup of iodide of iron is recommended as a tonic, sulphate of magnesia to keep the bowels opened, and local application of iodine to the hypogastrium when there is much pain. Injections, if used, should be copious, and the writer prefers cold to hot ones. Astringents may be introduced into these injections, if necessary, and good may often be derived from hip-baths, the author having a high opinion of sea-water for this purpose, as well as for injections.—*London Obstetrical Journal*.

RULES FOR FEEDING BABIES.

The following excellent rules, on the feeding of babies in general, are extracted from an essay recently read by Professor A. Jacobi, M.D., of this city, before the Public Health Association. The rules in question were prepared especially as a guide to the public, and coming from such a source, are more than ordinarily valuable. We wish they could be placed in the hands of every mother and every nurse in the land. Embodying, as they do, the results of the experience of one of our highest authorities on the subject, they are also of particular value to the general medical practitioner. They are as follows:

I. *Nursing Babies*.—Overfeeding does more harm than anything else. Nurse a baby of a month or two every two or three hours. Nurse a baby of six months and over, five times in twenty-four hours, and no more. When a baby gets thirsty in the meantime, give it a drink of water, or barley-water. *No sugar*. In hot weather—but in the hottest days only—mix a few drops of whiskey with either water or food, the whiskey not to exceed a teaspoonful in twenty-four hours.

II. *Feeding Babies*.—Boil a teaspoonful of powdered barley (grind it in a coffee grinder) and a gill of water, with a little salt, for fifteen minutes; strain it and mix it with half as much boiled milk, and a lump of white sugar. Give it lukewarm, through a nursing bottle. Keep bottle and mouth-piece in a bowl of water when not in use. Babies of five and six months, half barley-water and half boiled milk, with salt and white sugar. Older babies more milk

in proportion. When babies are very costive, use oatmeal instead of barley. Cook and strain. When your breast-milk is half enough, change off between breast-milk and food. In hot summer weather try the food with a small strip of blue litmus paper. If the blue paper turns red, either make a fresh mess or add a small pinch of baking soda to the food. Infants of six months may have beef-tea or beef-soup once a day, by itself, or mixed with other food. Babies of ten or twelve months may have a crust of bread and a piece of rare beef to suck. No child under two years ought to eat at your table. Give no candies, in fact nothing that is not contained in these rules, without a doctor's order.

III. *Summer Complaint*.—It comes from over-feeding and hot and foul air; never from teething. Keep doors and windows open; wash your children with cold water at least twice a day, and oftener in the very hot season. When babies vomit and purge, give nothing to eat or drink for four or six hours, but all the fresh air you can. After that time you give a few drops of whiskey in a teaspoonful of ice-water every ten minutes, but not more until the doctor comes. When there is vomiting and purging, give no milk. Give no laudanum, no paregoric, no soothing syrup, no teas.—*N. Y. Medical Record*.

HOW TO USE UP USELESS DOGS AND CATS.

Only fancy, dear Mr. Scotsman, our feelings this morning, when me and the cat were reading you, and came to this under the title of "Specific Articles Wanted":—

Dogs and Cats (few useless) wanted. Any kind of breed will suit. Apply at the Physiological Laboratory, University, between 10 and 11 A.M.

"What's the meaning of that?" says the cat to me. "The meaning," says I to the cat, "is that some philosophers (for I am a doctor's dog) want to find out all about our reflex actions and our ganglionic systems, to snip out neat little bits from our nerves and brains, and give us nice little shocks from batteries, and nice little doses of the Calabar bean, and nice little antidotes, and put all about how we behave ourselves into a book, and dissect us nicely afterwards—isn't this nice, pussy?"

Is it seemly or kind, is it what is due to us, to put in this horribly suggestive advertisement? If we dogs were uppermost, and were young doctors of an inquiring turn, how would you men like to see an advertisement in the *Canine Tooth* of the day—"Men and Women and children (few useless)"—isn't this, by-the-by, bad grammar or nonsense?—"any kind of breed, &c." Would you not feel insulted? And how would you like, even under chloroform, to have your reflex actions inquired into, and your *hippocampi minores* tickled with a knife, and your spinal marrow tampered with? Dogs and cats have "feelin's" as well as you. Yours truly and growlingly. BOB.

P. S.—My master has just come down to breakfast, and is reading it. He says, "Bob, if it's a joke, it's a very poor one: if not, it's worse. I'll let

them know at the Physiological Laboratory, that the eye of the Society for the prevention of cruelty to Animals, and the eye, too, of Capt. John Cumming, 17 Drummond Street, is upon them."

I and my master, and Sir Charles Bell, and the late Professor Syme, have our own views as to the question of vivisection; but I only speak now of the outrage and insult to me and the cat.—*Edinburgh Scotsman*.

CONVULSIONS IN A NEW-BORN CHILD, CAUSED BY MILK OF A WET-NURSE ABUSING ALCOHOLIC DRINKS.

C. E. BROWN-SEQUARD, M.D., New York.

(*Archives of Scientific and Practical Medicine*.)

This is the history of an important case. A child was born at the eighth month of gestation. It was fed with a bottle first, then by a wet-nurse. During the first month, it gained but little in size; under the suckling with the nurse, it increased considerably in size and weight; at this time it was noticed that the child had become hyperæsthetic, and then had convulsions, very severe and very frequent. No cause could be assigned to this affection, which baffled treatment, until, on further inquiry, it was found that the wet-nurse was in the habit of indulging in drinks of a wine very rich in alcohol. From the time the wine was cut off, the child, after a week, was completely cured, as the convulsions kept decreasing both in number and severity every day up to the seventh, when it was allowed to suckle again, as it was supposed that after this lapse of time, alcohol must have been thoroughly eliminated from the organism of the wet-nurse.—*N. Y. Medical Record*.

NEW MODE OF ADMINISTERING COD-LIVER OIL.

Numerous attempts have been made to render cod-liver oil less disagreeable, either by gelatinizing or solidifying it, but only with partial success. The system of capsules seems to answer best; but the great objection is the number of these which must be swallowed. Now it would seem that Messrs. Carre and Lemoine have contrived to incorporate the oil with bread. Each pound of bread contains a little more than two ounces of the oil or five tablespoonfuls, and three ounces of milk. Small loaves are also made which contain only two tablespoonfuls, and which altogether, weigh only five ounces. These loaves are beautifully white, look extremely well, and have hardly any taste. Both children and adults eat them very willingly. In M. Bouchut's ward, at the Children's Hospital, in Paris, thirty-four small loaves are brought every morning, and are looked forward to with much anxiety by the children for breakfast. They have been largely used among private patients, and no one complains of any disagreeable taste. Five or six tablespoonfuls of oil may thus be given per diem, incorporated with the bread taken with the usual food.—*Lancet*, August 2, 1873.

PRECAUTIONS IN THE USE OF CHLORAL.

Dr. Donovan calls attention in the *Dublin Medical Press and Circular*, to some dangers from chloral. He refers especially to "its dangerous effect when administered to patients laboring under acute pulmonary diseases, such as pneumonia, bronchitis, and all diseases whose tendency is to retard respiration. I have, I regret to say, seen not necessarily fatal cases of pneumonia, become hopeless after an ordinary dose of this death-producing hobby-horse of modern medicine.

"The first case in which I used it was that of a stout, well-nourished man, of about 25, who was suffering from extreme asthma and insomnia of pneumonia. Its effect on him was quite enough to warn me of its dangers; his wife and himself made me promise on my next visit not to give him any more of that *stuff*, as it was near killing him. He said that a very short time after taking it he lost all consciousness, and suffered from a kind of frightful nightmare, his wife stating that he was raving and muttering all night; when I saw him next morning he was in a state of complete prostration, his powerful constitution alone bringing him through.

"The second and last time it was administered to a patient of mine by a medical man of long standing and large practice, whom I met in consultation, and whose antiquity carried the day against my comparatively juvenile ideas. It was about eight or ten days after her confinement, which had been a dangerous one, when she was attacked with pneumonia; and, against my wish, received a twenty-five grain dose of chloral; the consequence was, what I had expected, in a short time after taking it she sank into a state of low muttering delirium, from which she woke with the death rattles in her throat."

DEATH-RATE OF VARIOUS CITIES.

Dr. Charles P. Russell, at the meeting of the New York Academy of Medicine, held May 15, 1873, read a valuable paper on "Mortality in the various States of the Union." The following selections are given by the *Medical Record* from his very comprehensive tables.

"The highest death-rate in the United States, according to the table, was given by Memphis, viz.: 46.6 in each 1000 inhabitants; in Savannah, the mortality was equal to 39.2 in each 1000 inhabitants; in Vicksburg 36.5; in Troy, 34; in Hoboken, 32.9; in New York, 32.6; in Newark, 31.6; in New Orleans, 30.6; and in Boston, 30.5. These were the highest figures of mortality. The other principal cities furnished the following death-rates: Philadelphia, 26.1; Brooklyn, 28.1; St. Louis, 20.1; Chicago, 27.6; Baltimore, 25.1; Cincinnati, 20.5; San Francisco, 17.2.

Of the larger British cities, Dublin yielded the greatest death-rate, viz., 29.9 in each 1000 inhabitants; that of Manchester being 28.6; of Glasgow, 28.4; of Leeds, 27.9; and of Liverpool, 27.1. The death-rate of London was as low as 21.4—less than that of any other important British city.

On the continent of Europe, the highest death-rate was noticed in Prague, Bohemia, viz.: the enormous one of 48.9 in each 1000 people. It was excessive in Cadiz, Spain, where it was equal to 44.7; in Munich it was 41.8; in Rome, 36.7; in Naples, 35.7; in Florence, 35.1; in Athens, 33; in Berlin, a city with less population than New York, it was 32.3, or nearly equal to our own; in Bologna, Italy, it was 32.2; and in Vienna, Genoa, Stockholm and Nice, 31.8. The large mortality of the last-mentioned city is owing to the many deaths of invalid strangers sojourning there. High death-rates prevailed also in Havre, Rotterdam, Leghorn, Venice, and Milan, ranging between 31 and 30. In Paris it was stated at only 21.1—but all deaths of strangers and travelers are there excluded.

The lowest mortality was given by the Swiss cities in Zurich, Geneva, and Basle—13.9, 19.4, and 20.9 respectively—and Christiania, Norway, 20.7. Algiers, Africa, gave a death-rate of 33.6. That of the Indian cities of Bombay and Calcutta was by no means high, being 29.2 and 25. In Madras, however, it was 35. In Montreal it was 37.3 and in Havana 35.1. The highest known death-rate prevailed in Valparaiso, Chili, viz.: 66.9 in each 1000 inhabitants. This was the only South American city heard from.

BEEF TEA.

The question as to the nutritive value of extract of meat has again been discussed by Baron Liebig, in which he carefully reviews the leading objections which have been urged against it. The veteran chemist's vindication of his opinions is of considerable interest, as he there sets forth his views on this subject shortly and precisely, and endeavors to correct the misrepresentations of the doctrine which he really teaches, and which he asserts that he taught from the beginning. He wishes it to be well understood that "he never asserted that beef tea and extract of meat contained substances necessary for the formation of albumen in the blood or muscular tissue;" and "that by the addition of extract of meat to our food, we neither economize carbon for the maintenance of the temperature nor nitrogen for the sustenance of the organs of our body; and that, therefore, it cannot be called 'food in the ordinary sense,' but we thereby increase the working capabilities of the body and its capacity to resist exterior injurious influences, i. e., to maintain health under unfavorable circumstances." Those constituents of the meat which are soluble in boiling water take no part in the formation and renovation of the muscular tissues, but by their effect on the nerves they exercise a most decided influence on the muscular work, wherein meat differs from all other animal or vegetable food. He therefore places extract of meat, and with it tea and coffee, under the head of "nervous food," in contradistinction to articles of "common food," which serve for the preservation of the temperature and restoration of the machine. Beef tea and extract of meat are of themselves incapable of supporting nutrition or maintaining life. Liebig, how-

ever, with justice, condemns the conclusions of those who, from comparative experiments on the nutritive value of fresh meat and meat extract taken *per se*, argue that the latter is not only useless for the purposes of nutrition, but positively injurious. It should be clearly understood that beef tea and extract of meat are only to be regarded in the light of auxiliaries to food, rather than independent articles of nutriment.—*London Medical Record*, April 16, 1873.

ON THE TREATMENT OF DIPHTHERIA BY THE VAPOR OF IODINE.

Dr. John O'Neill (*Australian Medical Journal*, March, 1873) says the unsatisfactory results of the local treatment of diphtheria have induced him to look a field for some new agent of greater value than those at present in use. He has been led to reject sulphurous acid, whether applied in solution or as vapor from burning sulphur. Iodine in the volatile state has yielded far more satisfactory results. In the form of tincture iodine has been already long since employed both internally and topically in diphtheria. The author volatilizes 20 to 30 grains of pure iodine by means of a heated shovel placed some little distance from the patient in order to avoid the direct action of the fumes. The fumes are inhaled and gain easy access to the larynx and trachea. Children seem especially tolerant of the iodine vapor. A milder effect is produced by allowing the iodine to evaporate slowly from flat shallow dishes. This may be repeated during the day, the object being to keep the air of the room sensibly charged with fumes. The histories of two severe cases are appended. In the one all the ordinary methods had failed: there had been hemorrhage from the throat, the effusion was extensive, and the patient refused food, and lay in a semi-comatose state. Three fumigations of thirty grs. each were employed daily for three days. On the fourth the exudation began rapidly to clear off. The other case is similar, but in it the membranes seem also to have involved the larynx and trachea.—*London Medical Record*.

GLYCERIN AS A MEANS OF DISGUIISING MEDICINES.

We desire to call the attention of our readers to the use of glycerin as a means of disguising medicines, especially those of an oily nature. Some time since it was announced that if castor oil be mixed with an equal part of glycerin and one or two drops of oil of cinnamon to the dose, it can scarcely be recognized. We have used this mixture a good number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty. We have given it to doctors without their discovering that they were taking castor oil.

In typhoid fever and other diseases in which turpentine is indicated, patients often object very much to its taste. The addition of half an ounce of glycerin to a six ounce emulsion disguises almost

completely the turpentine, especially if a drop of oil of gaultheria or of other volatile oil be added for each dose.

No doubt the principle is capable of wide extension. It is said that cod-liver oil may be disguised with glycerin and whisky; and Dr. Herbert L. Snow writes to the *British Medical Journal* that an addition of a small quantity of glycerin (about half an ounce to an eight-ounce mixture) will altogether obviate the sensation of astringency produced by the chloride of iron dissolved in syrup.

A CURE FOR EPITHELIAL CANCER.

BY GEO. G. BREWER, M.D.

Whatever tends to increase our capability of coping with a formidable disease cannot be uninteresting to the medical profession. Although cancer is a common disease, and one with which the surgeon and pathologist is familiar, it is a lamentable fact that it often baffles all treatment. I have always thought that the surgeon's knife was the proper and only treatment for cancer of every description. But my experience in treating an epithelial cancer lately has greatly changed my opinion. The subject of the case was a gentleman fifty years of age, stout and healthy. An epithelial cancer about the size of a hickory-nut located on the cheek near the ear. He consulted other medical gentlemen, who confirmed my opinion and advised him to have it removed. At his request, I removed it with the knife. Part of the wound healed in a few days, but the upper portion soon sprouted out with the cancerous disease. I then applied caustic potassa, not only to it, but to a considerable margin around it. In about ten days after the sloughing was over, I found that the entire margin had taken on the cancerous disease, and my patient was in a worse condition than before the operation. At my request, he consulted several surgeons, who objected to operating any more, for fear of enlarging the cancer, and advised a soothing treatment,—poultices of bread and milk. This was followed without benefit for six months, when a friend gave him a recipe which I did not object to his using:

Chlor. zinci, gr. viij;
Bloodroot, gr. v;
Starch, gr. viij.

Make into a paste with honey.

The cancer was at this time nearly as large as a hen's egg. After applying the paste for two weeks, he called to see me. I found it had diminished to half its former size. I advised him by all means to continue it. After a month's use of the remedy, the cancer was not larger than a dime. He continued to use it until the disease was cured. There is at this time nothing but a cicatrix, where before was a large epithelial cancer. I report this case for the purpose of calling the attention of the profession to this remedy in epithelial cancer, and do recommend those who have such cases to treat to give it a trial.—*Medical Times*.

A NEW OPERATION FOR ANEURISM.

On Monday, October 13, Dr. R. Levis performed, at the Pennsylvania Hospital, an operation so novel in its conception, so plausible in its theory, and, if it turn out successful, so important in its power of saving life, that it seems worthy of editorial notice. The case was one of subclavian aneurism, involving, it is believed at least to the extent of dilatation, the innominate. Tying the artery has been thought by the surgeons who have examined the case to be of more than doubtful expediency, and Dr. Levis has carried out a procedure which he tells us has long been in his mind. As every one knows, the late Charles H. Moore, surgeon to the Middlesex Hospital, conceived and put into execution the idea of introducing fine iron wire into aneurisms, to afford a nucleus about which clots should form. His practice has been followed in two cases, by Dr. Donville and Mr. Murray, both English surgeons. If we remember aright, in each of these instances the aorta was the artery involved, and the result was unfavorable.

Dr. Levis, idea consists in the use of horse-hair, with the belief or expectation that it will offer sufficient obstacle to the blood-current to cause coagulation, and at the same time, being animal in its nature and not apt to undergo rapid decomposition, like the catgut ligature will cause no irritation and not give rise to suppuration.

The hoserhair was introduced through a fine sharp needle canula, which was plunged into the sac. No difficulty was experienced in its introduction, and twenty-four feet nine inches of it were safely stowed away in the aneurism. In all probability this mass was driven in great part into the distal portion of the aneurism by the blood-current. Be this as it may, a marked diminution in the force of the pulsation of the aneurism and of the pulse of the wrist was at once induced. This has increased since the operation, the tumor has also gained greatly in solidity, the pain has lessened very much, and no unfavorable symptoms have resulted. As, on the other hand, the radial pulse and the aneurismal throb have never disappeared entirely, and as the dangers of suppuration of the sac are not yet past, it is too early to predict the result.—*Philadelphia Medical Times*.

GARMENTS MADE WATERPROOF.

A writer in an English paper says. "By the way, speaking of waterproofs, I think I can give travellers a valuable hint or two. For many years I have worn india-rubber water proofs, but will buy no more, for I have learned that good Scotch tweed can be made entirely impervious to rain; and moreover, I have learned how to make it so; and, for the benefit of your readers, I will give the recipe: In a bucket of water put half a pound of sugar of lead and half a pound of powdered alum; stir this at intervals, until it becomes clear; pour it off into another bucket, and put the garment therein, and let it be in for twenty-four hours, and then hang it up to dry, without wringing it. Two of my party, a lady

and gentleman, have worn garments thus treated in the wildest storms of wind and rain, without getting wet. The rain hangs upon the cloth in globules. In short, they are really waterproof. The gentleman, a fortnight ago, walked nine miles in a storm of rain and wind such as you seldom see in the South; and when he slipped off his overcoat his underwear was as dry as when he put them on."—*The Monthly Mirror*.

ABORTIVE TREATMENT OF BOILS.

The following, applied to boils with a camel-hair pencil or feather, gives great relief in a very short time. The inflamed surface, and a little beyond all around, should be painted with the medicine every fifteen minutes, or as fast as it dries, till a good thick coating covers the part. The throbbing tensive pain and the intense tenderness will be promptly relieved; the redness will subside; the smooth, shining integument will shrink and become wrinkled, and comfort will succeed torment. If the boil is in the first stage, it will disappear without slough. If slough has already formed, it will be quickly separated, and the cure soon complete:

R Tinct. arnicæ, ʒj;
Acidi tannici, ʒss;
Acaciæ pulv., ʒss. M.

It should be used as soon as prepared.—*C. B. Hall, in Cincinnati Lancet and Observer*.

DIGITALIS IN DROPSY.

A correspondent of the Medical Times and Gazette says:

I am induced to send you the following in hopes that others may follow my example, especially with regard to the uses of the same remedy. The value of digitalis in certain forms of dropsy is well known, and I would hardly venture to put before you the following notes were it not for the plans adopted for employing this remedy.

A woman of middle age was brought to the Hospital after she had been confined to bed for some time for dropsy. According to her own statement she had passed no urine for forty-eight hours previous to admission; certain it is that in eighteen hours after admission only eight ounces could be got away by the catheter. There was a good deal of dropsical effusion under the skin in various parts, especially in the walls of the abdomen and in the breasts. The urine was highly albuminous when tested after withdrawal by catheter. Under the circumstances it was necessary to get the kidneys to act, and I ordered to be applied for her loins, over the kidneys, an ounce of the tincture of digitalis on a piece of lint, to be covered over carefully, and to be renewed in four hours. The result was most satisfactory: urine began to flow profusely, and before long far exceeded the normal quantity. Had it been possible to procure the fresh leaves, I should of course have used them, but they were not to be had.

The other instances is a man with contracted kidneys and no dropsy, who from time to time becomes drowsy, and subject to fearful convulsions. In his case, too, nothing suits so well as digitalis, but when he becomes insensible, the very time he ought to take it, it cannot be given. Under such circumstances I commonly reduce a quarter of a grain extract of digitalis with water, and inject it under the skin of the arm. This, as a rule, makes the urine flow freely, and the patient gradually comes round.—*Medical Times and Gazette*.

ON RETENTION OF URINE.

By Dr. GEORGE H. B. MACLEOD, F.R.S.E., Professor of Surgery, University of Glasgow; Surgeon and Lecturer on Clinical Surgery, Royal Infirmary.

We receive a large number of these very troublesome cases. As a rule, the retention is due to organic stricture, but not a few patients present themselves in whom the retention arises from the congestion which so often follows a fit of intemperance. There are few affections in which one has more frequently to deplore incautious and rash interference than those of retention, from whatever cause arising. Very few cases come into the hospital that have not been seriously injured by the careless or ignorant employment of instruments, and, in the great majority of these cases—those of organic stricture and enlarged prostate—relief is obtained, after admission, without having recourse to instruments at all. The rule in my wards is to give these patients a warm bath, and to inject subcutaneously $\frac{1}{4}$ gr. of acetate of morphia when they are in the bath. If this fail, they get a full dose of castor oil and tincture of opium, followed by another hot bath, and if that fails I am sent for. I can easily recall the few cases, out of the large number admitted in which I have been forced to employ the catheter to relieve pressing symptoms, and in no case since I entered the hospital has it been necessary for me to puncture the bladder. Chloroform is of inestimable service in the management of such cases. Twice within six months I have been able to fulfil two objects—to relieve the bladder and cure the stricture—when compelled to use instruments in retention, and it was as bearing on that circumstances, that the foregoing remarks were made. Having failed in one case of very close organic structure, with much laceration of the canal, to introduce a catheter, I passed, with little difficulty, Holt's dilator, which, from its shape and construction, is very well fitted to pass a tight contraction, and thus I was able to split up the stricture at the same time that I relieved the bladder. This I have subsequently repeated in a similar case, with equally good effects; and, as such a use of Holt highly commended itself to me as a ready and effectual way of "killing two birds with one stone," I thought it worth while to relate it. I may add that it were well if the profession without the walls of the hospital would exercise more caution, and use less force in dealing with cases of retention.—*Glasgow Medical Journal*.

ABNORMAL BEHAVIOR OF ALBUMINOUS URINE UNDER THE USUAL TESTS.

Dr. Brown-Sequard (*Archives of Scientific and Practical Medicine*) points out a possible source of error in applying the usual tests for albumen in the urine. It is a well known fact that boiling alone is not always sufficient to cause coagulation of albumen, even when the reaction of the urine is decidedly acid. In such cases, however, the subsequent addition of nitric acid, with a renewed application of heat, will generally produce a precipitate. Dr. Brown-Sequard states that in several cases that have come under his observation, he has demonstrated the presence of albumen by adding nitric acid (and heat) after the specimen had been once boiled. There must be, therefore, a modification of albumen, which so far from being coagulated, actually loses its coagulability by boiling.

EFFECT OF CARBOLIC ACID ON THE URINE.

Mr. W. A. Patchette reports a number of observations upon a peculiar change of colour in the urine, produced by the external application of carbolic acid to a raw surface. A blackish or dark olive green discoloration occurs in from four to forty-eight hours, and the urine resembles an infusion of tea or digitalis to which a little iron has been added. The discoloration does not appear with any regularity or constancy, and may follow the internal use of carbolic acid, but unless poisonous doses have been given, the color is not so deep as that produced by the external application of the acid.—*London Lancet*, Aug. 23, 1873.

LIQUID NOURISHMENT FOR SICK STOMACHS.

An egg, well beaten up, to which add one pint of good milk, one pint of cold water, and salt to make it palatable; let it then be boiled, and when cold any quantity of it may be taken. If it turns into curds and whey it is useless.—*H. S. Halahan in Dublin Medical Journal*.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, NOVEMBER, 1873.

TO OUR SUBSCRIBERS.

In our last issue we again sent accounts to those who were still indebted to us for the first volume of the *Record*. Some have responded by sending us the amount, but there are a number who still keep their

purse strings closed. We once more appeal to them to remit us last year's subscription, without any further delay. The amount to each is but a trifle; in the aggregate it is considerable. *Remit as soon as you read this notice. It is only two dollars.*

BLOODLESS AMPUTATIONS.

In our last issue, we inserted a brief letter from Dr. R. F. Godfrey, of Montreal, one of the Graduates of Bishop's College, session 1872-3—who is at present pursuing his studies in London, in which allusion was made to a new method of amputating, which he had seen performed by MacCormac, now in the metropolis, but formerly of Belfast. This operation was comparatively bloodless in its character, and as the method adopted is one of very recent introduction, we make no apology for bringing it now more fully before our readers. It was first brought to the notice of the profession on the 18th of April last, upon the occasion of the second Congress of German Surgeons, by one Esmarch, who made a very short communication on a "Means of Avoiding Loss of Blood in Operations on the Extremities." He declared that according to his experience it was possible to render and maintain a limb exsanguine by firmly enveloping it in elastic bandages applied from the extremity towards the body. These bands force back all the blood from the limb, and as they exercise at the same time an energetic constriction (the limb is put into a strong tube of rubber, as it were) they prevent the accession of fresh blood when the first band is removed. Esmarch claims that it is not only in amputations that is saved, in this way, much of the blood that is lost by the tourniquet; it has great advantages in resections, extraction of sequestra, difficult extirpation of tumors and other operations which may not be executed so rapidly as amputations. By the adoption of this method it is not necessary to use sponges to clear the field of operation: one may operate, dry, as upon the cadaver; this method has no injurious effect whatever upon recovery even though the circulation may have been interrupted in a whole extremity for a quarter of an hour. The details are as follows: An elastic bandage, about two inches and a half in width and from five to ten yards long, is firmly bound round the limb, commencing at the toes and fingers as the case may be, and is then continued upwards so as to drive the blood before it out of the veins and arteries. When the desired point has been reached, a strong india-rubber band, about half an inch in diameter, is tightly drawn two or three times round the limb just above the elastic ban-

dage, and fastened by hooks. The bandage is then removed, leaving the tissues blanched and exsanguined. Not a particle of blood is lost during the operation, which is really more bloodless than when performed on the dead subject. After the operation is completed the rubber rope is removed, and the blood then finds its way into the vessels, which are ligatured or twisted according to the taste or inclination of the surgeon. On this plan, which has been carried out at St. Thomas's, Guy's, London, and St. Bartholomew's Hospitals, London, many operations have now been performed, including excision of the knee and elbow joints, and amputations. No ill effects of any kind have hitherto been observed from the use of this contrivance. Although the durations of the operations have varied from a few minutes up to half an hour, and even more, during the whole of which time the circulation has been completely arrested, no evidence has been afforded of the formation of emboli or thrombi in any of the cases. But it is one of its possible evils, that the complete stoppage of circulation may lead to the formation of a clot, which, on the re-establishment of the circulation, may be carried along the vessels and arrested in some part of their course, giving rise to circumscribed inflammation or even gangrene. On the removal of the rubber rope, the blood shows itself at the wound in some cases immediately, and in others not for several seconds, or even a minute afterwards. The part then rapidly becomes very red, of a slightly livid hue, and somewhat swollen; which may be accounted for by the small vessels and capillaries becoming engorged before the *vis a tergo* is sufficiently restored to drive the blood up into the venous column.

Upon the continent this plan has been practised for several months, and seems to have met with universal favor. At Vienna, Professor Bellroth has used this method in fourteen cases, and speaks of its success in glowing terms.

In Montreal, it was made use of about the middle of October, for the first time, by Dr. Fenwick, one of the staff of the Montreal General Hospital, who amputated below the knee, on a male subject. In the absence of the proper elastic bandage, drainage tubing was used. The success was complete, not a table spoonful of blood being lost.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

The Annual Meeting of this Society was held on the third of October, when the retiring President, Dr. R. Palmer Howard, gave a brief address previous to leaving the chair. He mentioned that, during the year, nineteen papers had been read by members

before the Society; a decrease of two compared with the previous year. He stated that the papers were contributed principally by the junior members of the profession, which was to their credit—only five being read by those occupying what might be termed the intermediate stage, while the seniors made a poor appearance, which he regretted exceedingly. Allusion was made to the discussions which, upon two or three occasions, had taken place with a view of preparing a new tariff for the guidance of members, and hoped that, when completed, it would be found of great use. A resolution, conveying thanks to the retiring officers, was carried unanimously. The election of officers for the ensuing year then took place, and resulted as follows:—President, Dr. William H. Hingston; First Vice-President, Dr. Reddy; Second Vice-President, Dr. Robert Craik; Council, Drs. Godfrey, Fenwick, and Francis W. Campbell. The Secretary and Treasurer, Dr. T. G. Roddick, was re-elected by acclamation. His financial report was read, and was eminently satisfactory, there being a considerable balance in his hands.

The meetings will take place every fortnight during the winter, and we trust that the attendance will be excellent. We also cannot help expressing the hope, that the "gentle rebuke" of the retiring President will not be lost upon the seniors in the profession.

TYPHOID FEVER IN MILK.

Our European exchanges have for some time back been filled with details, concerning an outbreak of typhoid fever, which occurred in a particular locality in the city of London, towards the end of last July and commencement of August. Within a comparatively short time some five or six hundred persons were attacked, who belonged to about one hundred and fifty families, all occupying, more or less, good positions in society, and who resided pretty much in close proximity to each other. It is a fact, somewhat singular, that among the first to be attacked was the family of Dr. Murchison, a well-known authority on fevers. Three of his children were seized with the disease upon the same day, and within a week two others were prostrated. Dr. Murchison, feeling convinced that the sanitary arrangements of his house were satisfactory, believed that some outside cause must be sought for. Reflecting upon other cases of typhoid fever, which had occurred months before, and to which his attention had been given, his thoughts were directed to his milk supply, and enquiry among his medical friends in his neighborhood, confirmed his suspicions. On the fourth of

August he communicated the facts he had collected to the Medical Health officer of the District, who at once notified a large Dairy Company, who supplied pretty generally the locality with milk, of the information he had received. From this time new cases rapidly occurred, and as the neighborhood is largely populated with well-known medical men, many of the cases were members of their families. All of those attacked had partaken of the milk of this Dairy Company; and, convinced of the source of the disease, Dr. Murchison and Sir William Jenner appealed to them to suspend its sale, which they declined, until satisfied of its being the cause of the epidemic. The disease continuing to spread still among its customers, arrangements were made for an inspection of all the farms from which the supply of milk was drawn. The result of the investigation was such as to prove conclusively that the suspicion of Dr. Murchison, as to milk being the source of the poison, was correct. Those appointed to investigate the matter discovered that a well upon one of the farms was polluted by the drainage from a privy into which the evacuations of a typhoid patient had been emptied, and that the neighborhood was not free from the disease. At once the supply from this farm was stopped, and the epidemic began to abate. As the Company affirm that the water from this well was not used to dilute the milk, nor even the cows supplied with drink from it, it becomes a question how the poison succeeded in getting into the milk. The reply suggested is that the water was used for washing out the milk cans. To many this may not appear as being a sufficient explanation; yet, if correct theories in regard to fever poison and its power of multiplication be admitted, it is just possible, at some time or other, sufficient water may have been left in a can to carry the seeds of the disease. Altogether the information which has been obtained is important, proving that every possible precaution should be observed with regard to purity of milk, as that fluid is said to be peculiarly favorable to the rapid increase of the poison of typhoid fever. We all know how rapidly butter and milk take in a flavor, which may be called *turnipy*, when the animals are fed on turnips; and, although we have no positive proof that organic poisons will pass into the milk without decomposition, it is just within the bounds of possibility.

Typhoid fever continues prevalent in Montreal, but so far as we can learn, it is generally of a mild character.

A FATHER KILLS HIS OWN CHILD.

One of the most awful instances of the results which sometimes follow an ungovernable temper, was brought to light at the term of the Court of Queen's Bench in Montreal, which closed its sittings about the middle of October, in the case of *The Queen vs. Lefebvre*. The facts of the case, as detailed upon the trial were as follows: Lefebvre is a Notary, and resided in the Parish of St. Marthe, County of Vaudreuil. Upon the second of September last, he was working in one of his fields, and placed his young son, aged about seven years, at a gate to prevent cattle from getting among the grain. By some means this duty was not carefully performed, and cattle did get among the grain. Lefebvre upon seeing this, became very much enraged, and ran after his son, who fled from him to another field, in his flight hurriedly crossing a fence. In this second field the father overtook him, and seizing him by one arm, kicked him violently about the body till he fell to the ground, when he gave him eight or ten more kicks. The child reached home with great difficulty, and on the following day, a Dr. Lalonde, residing close at hand, was called in to see him at the instance of Lefebvre. In evidence he thus describes the condition in which he found the boy. "Breathing slow, face pale, large drops of sweat on the forehead, the case was hopeless; returned home for medicine; on returning the child was dying. Made a post mortem on the 5th of September. There were no marks of violence; had however remarked a greenish color between the skin and muscles, and he had come to the conclusion that death was due to a shock sustained by the nervous system, occasioning congestion of the brain. The prisoner had told him he had kicked the child; he had no doubt that to these blows was due the congestion of the brain, ultimately death. There was a rupture of the intestine, which was necessarily fatal."

The evidence as quoted above, is taken from the report published in the Montreal *Herald*, and as it stands uncontradicted we presume it is correct. If so we confess regret that such evidence should be given by a medical witness. The veriest tyro in medicine would not seek to give the credit of the fatal issue to a congested sensorium, when he found a ruptured intestine, and saw the patient an hour or two previous to death, exhibiting all the signs of the last stage of Traumatic peritonitis. A clearer case of cause and effect it would be hard to find, and how Dr. Lalonde could possibly express the opinion attributed to him, we confess ourselves completely at a loss to understand. When given at the inquest it had its

effect however upon the jury whom the Coroner of Montreal assembled, and the result was a verdict of accidental death was returned. It seems hardly to be credited that a Coroner with the experience of Coroner Jones, should have received such a verdict. To doubt for a moment that its absurdity did not strike him, would be insulting. What can we think then at his not only receiving it, but letting the matter drop? We hesitate to characterise it as we think it deserves. That it was not allowed to rest, is due to the action of a resident of Vaudreuil. At the trial, which as we have already said took place the commencement of October, Dr. Lalonde gave the evidence we have quoted, and which in our opinion is far from being creditable to him. The defence, finding that the congestion of the brain theory was blown to the wind, principally by the evidence of Dr. Craik of Montreal, tried to make out that the ruptured intestine was the result of a fall the child received while crossing a fence in his efforts to escape from his father, and one Dr. Lefebvre, (no relation of the prisoner) informed the jury that if the rupture had been due to kicks, he could not have walked home, while if it was due to a fall from a fence, he could have walked home. Verily a Daniel come to judgment—yea, a second Daniel. We should like to know his authority for this diagnostic sign, as to the cause which produces rupture of the abdominal organs. In spite of all the contradictory professional evidence, that of the majority of medical men we regret to say, not being calculated to raise our profession before the public—the jury brought in a verdict of guilty, and the unfortunate father, who when too late, realized the awful position his ungoverned temper had placed him, was at the close of the term, sentenced to three years confinement in the Provincial Penitentiary.

MONTREAL GENERAL HOSPITAL.

We have received the Fifty-first Annual Report of this valuable Institution, and appended to it is a brief history of the Hospital from its foundation. From the report we learn that the ordinary income of the year, which terminated on the 30th of April last, was \$32,342.93. There has been an increase over that of last year in the income from the following sources, viz.: Subscriptions and donations, \$816.32; Church collections, \$54.91; Medical Students' fees, \$171.50; Interest, \$3,307.51. On the other hand, the revenue from the following sources has fallen below that of the previous year, viz.:—Subscriptions from employes, \$502.03; pay patients,

\$491.75. The ordinary expenditure of the year was \$24,423.74, which exceeds that of last year by \$1,865.41; but it is gratifying to be able to add that it falls short of the revenue by \$7,919.19.

The extraordinary expenditure of the year was \$6,847.05, to meet which the contributions to the Endowment fund ("Extraordinary Income") for the year, amounting to \$6,214.46, were applied; thus leaving a balance of \$632.59 to be charged to stock account.

The number of in-door patients treated during the year was one thousand eight hundred and twenty-one (1,821), and of out-door, eleven thousand three hundred and forty-nine. These figures show an increase of two hundred and twenty-six (226) in-door, and (233) out-door patients over those of 1871-72. Of the in-door patients, there died during the year, 139; were discharged cured, 1,149; were discharged improved, 328; were discharged unimproved, 98; remain in hospital, 107.

The most noticeable feature in the medical history of the institution during the year was the persistence of small pox during its earlier months, the severe epidemic of that disease which began the year before not having ceased, although the ratio of mortality had considerably declined. The number of persons admitted into the Small Pox Hospital in 1871-72 was 114, of whom 33 died, a ratio of 1 in 3.45. In 1872-73, 118 cases of that disease were treated, of whom 19 died, or 1 in 6.21.

The new wing to be called the Morland Wing, for the admission of children is now under contract, and will soon be ready for occupation. Besides about thirty beds for children, it will contain rooms for private patients. Its basement will be devoted to the wants of the out-door patients, and its highest flat will serve as a dormitory for servants. Its cost is estimated at about \$16,000.

MONTREAL SCHOOL OF MEDICINE AND SURGERY.

The Montreal School of Medicine and Surgery (Montreal Branch of the Medical Faculty of Victoria College) have followed the example recently set them by the two other Medical Schools in Montreal, and erected upon Hotel Dieu Street, and directly opposite the Hotel Dieu Hospital, a building for their use. The session opened about the 7th of October, but as the building was not quite ready for occupation, the lectures have thus far been delivered in the Operating Theatre of the Hospital. It is anticipated, however, that before this reaches our readers,

they will have removed to their new School, which is a handsome structure built of rough Montreal limestone. It has a frontage of 50 feet, by a depth of 55 feet, and is two storeys high. The ground floor is occupied by the Janitor, and has smoking and clothing rooms for students. On the first storey is a class room, 24 feet wide by 46 feet in length, and 17 feet high. It is said to be capable of seating 250 students. On this flat is also the Library and other rooms for the Professors use. On the second flat is the Anatomical and Chemistry lecture room, which has a height of 20 feet—also the Dissecting Room, (floored with zinc) 46 feet long by 24 feet wide. The building seems admirably arranged for the purpose for which it is intended, and we congratulate the Faculty upon their occupancy of a building which is a credit to their enterprise.

SKIN OF A WHITE MAN ENGRAFTED UPON A NEGRO.

Dr. Maxwell, of Newcastle, Delaware, reports in the *Philadelphia Medical Times*, of the 18th of October last, that in February, 1872, he was called to a negro, who had been shot in the face with bird shot. As he was only a few feet from the muzzle of the gun the discharge passed through the left cheek, as compact a mass as if it had been ball, and passed out at the posterior portion of the ramus of the inferior maxillary bone just below the lobule of the ear. There was extensive sloughing, and Dr. Maxwell proposed skin grafting to expedite the healing process. He conceived the idea of transplanting the skin of a white man, and the consent of the patient having been obtained, Dr. Maxwell cut from his own arm a piece of skin about the size of a dime. He also took from the patient's arm a similar piece, and having cut them into pieces the size of a canary seed, carefully inserted them on the wound. All the white grafts except one died, and this one increased rapidly in size, till it was more than half an inch in diameter. After the wound had healed, Dr. Maxwell thus describes the patient's condition: Meeting my patient on the road I readily distinguished the white patch on the side of the face twenty or thirty yards distant. Upon examination, dark-colored lines forming a net work on the white skin were discovered. These lines increased in size and in number, deepening the color of the patch, until at the end of the third month the whole surface of the wound was of a uniform black color." The experiment is exceedingly interesting, and it is said to be the first published case of the kind.

PHYSICIAN'S VISITING LIST.

Although within a few years, several other visiting lists have been introduced to the notice of the profession, we candidly believe that to that which has for so many years been used by Messrs. Lindsay & Blakiston of Philadelphia, must be awarded the prominence. It is concisely arranged, beautifully got up, and is invaluable to the profession. We have used it regularly for the past ten years, and don't well see how we could get along without it. Some physicians that we know of still cling to their memory and small slips of paper. To such this visiting list would save several hundred dollars in the course of a year. As we have more than once said, when noticing its annual appearance, "we fail to see how any physician can do without it"

A SELF-SACRIFICE TO MEDICAL RESEARCH.

Dr. Obermeyer, assistant of Professor Wilms, of Vienna, who acquired especial reputation for his theory of typhus fever, undertook some experiments upon the character and therapy of cholera upon his own person. For this purpose he ejected into his own veins the blood of a cholera patient. The melancholy consequences of this bold experiment soon ensued. He was soon attacked with the disease and died on the seventh day. A great number of his colleagues crowded about him in the vain attempt to rescue him from his untimely end.

THE FOOTING DINNER OF THE STUDENTS OF MCGILL UNIVERSITY.

This annual gathering took place on the evening of October 17, at the Terrapin Restaurant, and is said, by those who were present, to have been a most enjoyable affair.

The bitter taste of Quasia, Colocynth and Quinine can be avoided to a very great extent by first masticating a small piece of liquorice root. Though a simple, it is said to be a very effective means.

PERSONAL.

Dr. Aikins, of Toronto, returned by the *Sarmatian*, on the 27th of October, from Europe.

Dr. André Latour, Assistant Demonstrator of Anatomy in Bishop's College, returned from Europe by the *Prussian*, October 21st. He has commenced practice in Montreal.

Dr. Côté has gone to Biddeford, Maine, to commence practice.

Dr. Alphonse Brodeur, (M.D., McGill, 1863,) is in practice at Roxton Falls, Que.

Dr. James E. Sawyer, graduate of McGill College, 1863, was in the city for a few days the early part of October. For the last few years he has been residing in Louisiana, U.S., where he went on account of his health, which has been in a delicate condition for many years. This summer he returned to Belleville, on a visit to his relatives, but is obliged to again proceed south, from failing health. This time he intends to try Texas.

Dr. Edward Warren, late professor in the Baltimore College of Physicians and Surgeons, has recently been appointed by the Khédive of Egypt to the position of staff-surgeon in his army, with the rank of colonel, and with the privilege of practising medicine and surgery in the city of Cairo. Dr. Warren is the author of the famous repartee to the Attorney-General, in the Wharton case, that "lawyers' mistakes sometimes hang six feet in the air."

Medical Items.

It is stated the chair of Physiology in the University of Edinburgh is likely to become vacant by the resignation of Dr. Hughes Bennett, whose health is, unfortunately, far from robust.

NATURE OF MUMPS.

Dr. Bouchut, in a note communicated to the Academy of Sciences by Claude Bernard, states that parotitis is simply a salivary retention due to catarrhal inflammation of the excreting canal of the parotid.

BIRTHS.

In Montreal, on the 1st Nov., the wife of Dr. George W. Wilkins, of a daughter.

In Montreal, on the 9th inst., the wife of Dr. G. P. Girdwood, of a daughter.

At Moulinette, Ont., on the 8th inst., the wife of Zoyst Gagnon, M.D., of a daughter.

MARRIAGES.

On the 24th Sept., at St. George's Church, Montreal, by Rev. James Carmichael, M.A., George W. Lovejoy, M.D., L.D.S., to Mary, daughter of James Sculthorp, Esq., of Montreal.

In Montreal, on the 18th Oct., by the Rev. Henry Wilkes, D.D., Charles E. Hickey, M.D., of Morrisburgh, Ont., to Libby M., daughter of Mr. J. C. Beers.

At Kingsville, on the 3rd September, by the Rev. John Downie, Forrest Frew Bell, M.D., of Amherstburg, to Isabel Wigle, only daughter of Simon Wigle, Esq., of Kingsville.

DIED.

In Toronto, on the 20th October, inst., William Hallowell, M.D., in his 60th year.

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Original Communications.

Stone in the Bladder. By W. H. Hingston, M.D.
L.R.C.S., Edin. Surgeon St. Patrick's department,
Hotel Dieu Hospital.

[Read before the Médico-Chirurgical Society of Montreal
November 21, 1873.]

Papers on stone in the bladder are now so frequent as to lead one to suppose either that the disease is more frequent, or that the trouble is less liable than formerly to escape attention. My own opinion is that both these circumstances obtain. Two papers on stone in the bladder have, within a comparatively short period, been contributed to the medical literature of this country by members of this Society—one on lithotomy, the other on lithotomy and lithotripsy. Still the subject is always interesting—always new. The case I have now to submit possesses certain features which may interest the members of this Society. It is an exception to a general rule in its history, and is a marked exception to another general rule in its indication as to the choice of operation.

For practical purposes the varieties of stone may be reduced to three classes; which, in the order of their frequency, may be mentioned thus: the uric acid and urates, the phosphates and the oxalates of lime. An oxalate is usually oxalate throughout; the same may be said, but with occasional exceptions, of the two other varieties. The stone I have submitted to your inspection possesses in addition to its large size, a combination of three varieties, a combination which puzzled me not a little, and left me for a time undecided as to which operation, to choose, lithotomy or lithotripsy, so as to expose the patient to the least danger.

A. Darragh, of Syracuse, N.Y., consulted me on 12th July last, and gave a *peu près*, the following history of his case. He is twenty-three years of age, and had suffered from early infancy. He states that when fifteen days old he had troublesome micturition, and the doctor was consulted. How often he was carried to the doctor he knows not, but within his recollection he had seen a dozen physicians, most of whom gave anodynes and diuretics. The pain at times was agonizing, while at others he was comparatively easy and comfortable. Certain seasons and certain conditions of the atmosphere seemed to influence and modify his sufferings; but at no period of the day, and rarely at night, could he consider himself free from pain. The suffering at times was so great, particularly at night, that he was forced to lie on one side (the right), and even

then the neighbours were often awakened by his screams. This condition of things continued for a period of twenty-three years with varying severity. A severe paroxysm seized him when in Syracuse, State of N. Y., and a physician being called suspected the existence of stone, and on being sounded shewed his suspicions to be well founded. The patient then came to Montreal and placed himself under my care.

An examination showed the existence of stone, but which when struck did not give out that sound which more or less characterizes its nature and consistence. When struck on one side it gave out a dull *thud*, to use a Scotticism, while when another portion was smartly struck, it gave out a sharp, hard, metallic ring. I tried to measure the stone with the lithotrite; but this was a matter of much difficulty, and I have now reason to believe that while I made out, tolerably correctly, its two lesser diameters, the greater was not, could not, be made out, the lithotrite not being susceptible of sufficient dilatation to permit it within its jaws. The soft muffled sound which the calculus emitted when struck, and its huge size, induced me to think that I had to deal with a phosphate; and the alkaline condition of the urine favored that belief. At the first examination I seized the calculus and easily detached a not inconsiderable portion of its crust. The urine, for a few days, was more markedly alkaline and loaded with phosphates; and pieces the size of a split pea and smaller, came away during micturition. Four days afterwards, at another seance, I repeated the attempt at crushing, but the lithotrite closed on a body as unyielding as the instrument itself, showing unmistakably the phosphate formed the crust of the stone and that a havier stone lay hidden within. I threw aside the lithotrite, and aided by the hospital staff proceeded at once to lithotomize. The old fashioned, good fashioned, lateral method was adopted; the bladder was reached without difficulty, the stone seized, and, guided by the left index, with a coaxing, swaying motion, with not more force than was necessary, was extracted. It is now before you, gentlemen, and from all I can learn, is the largest ever removed entire from a living subject in Canada. It measures in greatest circumference $9\frac{1}{4}$ inches, and weighs 5 oz. 5 drachms. The crust is phosphatic and the nucleus is oxalate of lime, hard as flint, into which no lithotrite could be forced to take a grip; and even now, removed as it is from the body, I much question if the best lithotrite ever made could reduce it to proportions to enable it pass per *vias naturales*.

The patient made a good recovery; the urine trickled through the wound during the first fortnight, when it gradually ceased; and on the 21st August, 33 days after the operation, the patient left the hospital for the United States in perfect health, and freed of the malady for which he had come to the city.

The diagnosis of stone is sometimes not easy, but when once its presence is established another difficulty presents itself, that of selecting the operation best suited to its size and hardness. Formerly and even now to those who invariably cut the diagnosis was not a matter of moment, as the knife made a way equally for a large, small, hard or soft stone; but to those not wedded to either operation, it is important to select the right one; otherwise the mortality would be greater than if lithotomy were always chosen.

There are but two ways of getting rid of stone. The advocates of cutting would fain believe that at no distant day the lithotrite will be laid aside, while those in favor of crushing are disposed to hope, that instruments will ultimately be fabricated, capable of seizing any stone, however large, and of crushing it, however hard it may be.

I differ entirely from both, and believe that lithotomy will ever maintain its position as a preferable operation in children, and a necessary operation in exceptional cases, as in the present, in the adult; but that it will, it must give place to lithotripsy in the adult when too long an interval has not elapsed before the discovery of the stone and the attempt at its removal, when its moderate size will permit its being crushed without difficulty on the part of the operator, and without much danger or suffering on that of the patient.

Here, however, in the case before us, there was no choice. The lithotrite was powerless to cope with the increasing hardness of nearly a quarter of a century. Had the stone been discovered earlier it might have been crushed with every certainty of success.

Sir Henry Thompson in a somewhat prophetic strain, says, when addressing his class:

"I hope you will live to see the day when lithotomy for adults will disappear. I do not suppose," says Sir Henry, "I shall; but I do expect to live to see one thing, and that is, lithotomy becoming very much rarer than it now is. You certainly will live to see it one of the rarest operations. I do not say that I look forward to that with any particular pleasure: for it is a grand operation, demanding all the skill, self-command, and force of a man. It is

one of the best practical tests of a good surgeon, and looking at it from that point of view, one cannot desire its discontinuance; but it will disappear most assuredly; and as it will be for the benefit of humanity that it should, we must acquiesce in the result."

Gentlemen. -- From my humble standpoint I endorse most fully the views of one of the chief, if not the greatest among living lithotomists and lithotritists; and this from an equal practical acquaintance with both operations, and with a success equal in both.

CASE OF EMBOLISM OF THE LEFT MIDDLE CEREBRAL ARTERY, BY R. A. KENNEDY, M. D., PROFESSOR OF ANATOMY IN THE UNIVERSITY OF BISHOP'S COLLEGE ATTENDING PHYSICIAN MONTREAL DISPENSARY.

Read before the Medico-Chirurgical Society of Montreal, November 28th, 1873.

MR. CHAIRMAN AND GENTLEMEN,--It was not until several days had elapsed after my attendance had ceased that I thought of bringing this case before you. It was interesting to me, inasmuch as it was the first of its kind in my practice, and also from the fact that the post mortem examination verified the diagnosis made during life. Enough will be seen from the pathological specimens before you to give an idea of their condition:

J. H., an unmarried female, æt. 27, born in England and of delicate habit of body, had an attack of typhoid fever two years ago, since which time has never enjoyed good health. Some time after recovering from the fever, and during the winter, had walked across the ice to St Lamberts in company with several friends. She suffered severely afterwards, but did not seek medical aid. Since that time she has been unable to walk any distance or exert herself from the great distress and difficulty of breathing thereby occasioned. Did not suffer from palpitation, but occasionally has had spells of fainting. There is no history of rheumatism.

On the 2nd of November, I was requested to visit her, and found her ill from an attack of pleurisy on the right side; a friction murmur being heard over the lower lobe of the right lung. At the same time there was observed over the heart a peculiar burring sound, only heard at midsternum, opposite the third costal cartilage, and during the systole of the ventricles; which gave the impression that something was attached to the aortic valves, and thrown into vibration by the current of blood passing upwards.

A loud mitral bruit could also be heard, most dis-

tinctly below the apex of the heart, taking the place of the first sound and followed by a slightly different bruit which partly obscured the second sound, but did not occupy the whole of the ventricular diastole. I will not occupy time by giving in detail the symptoms and treatment of the pleurisy. Suffice it to say, that the inflammation subsided under treatment, which consisted at the outset of aconite and opium internally, counterirritants and poultices externally. The pain subsided gradually, no effusion occurred, and the friction sound was lost. The pulse never exceeded 96, or the temperature 102°.

On the following Saturday, November 8th, she was convalescent, and able to sit up. During the evening she was up sitting with the family and felt much better than she had for some time, and nothing of an exciting nature occurred to disturb her. She went to bed at 9 p.m. and slept a short time. On awakening discovered that she could not move her right arm. I was hurriedly sent for, and found the following condition:—Considerable mental excitement, but functions of mind perfect, being perfectly sensible, speaks plainly but rather thick; pupils normal, skin hot and moist, face much flushed, temperature normal, pulse 100, respiration quickened, tongue clear, no nausea or vomiting, slight pain in left temple, no pain elsewhere. Partial hemiplegia of right side, voluntary motion not entirely lost as she was able to move her arm or leg when asked to do so.

No paralysis of muscles of face but the tongue was slightly pushed to one side when protruded. No dysphagia. Sensation normal. On referring to the special lesions which cause hemiplegia, viz:—Softening, apoplexy, and embolism, softening was excluded as there was no previous symptoms, and apoplexy from the absence of nausea or vomiting; inequality of pupils; stertorous breathing; or loss of perception; as well as the incompleteness of the paralysis. I therefore concluded that the cause must be embolism of the left middle cerebral artery as the function of the left corpora striata was alone disturbed. On examining the heart I found the mitral murmur as before, but that of the aortic valves was gone, the burring sound being lost. This I looked upon as confirmation of the diagnosis already made, in addition to the fact that cerebral embolism most generally occurs on the left side. Looking upon it therefore as a case of embolism, and that medical treatment would be of little benefit, I enjoined perfect rest and strict quietness and not to be spoken to more than necessary. The following mixture was also prescribed, with the object of quieting cerebral

excitement, and to lessen the flow of blood through the brain, so as to favor the gradual establishment of collateral circulation, if possible.

R Potas Bromed ʒ ii.

Ext. Ergota Fl ʒ ii.

Aguae ʒ vj. M.

S. One tablespoonful every six hours.

November 9th, 10 a.m. Patient passed a quiet night, has slept occasionally, symptoms somewhat improved; pulse 90; respiration quiet but slightly quickened; temperature normal, but skin feels warmer than natural. Tongue clear but dry, bowels not moved during last 24 hours, urine passed as usual, no pain whatever. Voluntary motion considerably improved in affected side, protrudes tongue correctly and speaks plainly. From the improved condition I was in hopes that collateral circulation was becoming established, and ordered a nourishing diet, a dose of castor oil and to continue the mixture. I was sent for at 10 p.m., all the symptoms increased in severity. More complete loss of motion in right side, tongue more affected and speaks very thick but can be understood. No loss of sensation or mental perception. The other symptoms as before, the bowels were moved and urine passed during the day.

Monday 10th., 10 a.m. Symptoms the same as previous night, there being no change to record. I was requested to meet Dr. Fuller, and at 4 p.m. we held a consultation. D. F., after careful examination, agreed as to condition and treatment. The only alteration in symptoms, was a slightly increased loss of motion; still she was able with some effort to move the arm. I was again sent for at 10 p.m., and found her perfectly helpless; vomiting had occurred one hour previous to my seeing her.

No motion in affected side, excepting an occasional clonic spasm, lower jaw slightly dependant, and paralysis of buccinator.

Tongue and lips dry, and covered with sordes; could swallow but with some difficulty; respiration laboring; pulse weak and almost imperceptible; pupils left side dilated; face very much flushed. Consciousness was not lost, as she would turn her eyes to the party addressing her. Suspecting cerebral hæmorrhage, I applied cold to the head and administered ergot.

From this time she sank gradually; clonic spasms increased in number and intensity, respiration more labored. Involuntary defecation and micturition and at last coma. Death relieved her next morning at 9.30 a.m.

Post mortem, one hour after death:

Abdominal cavity not opened.

Thorax, Lungs, substance healthy but somewhat congested. Evidence of recent pleurisy on right side, the pleura covering the lower lobe of right lung adherent in patches to parietics. No fluid in pleural cavity.

Heart: right side full of blood, right auricle nearly filled by a large clot, the attached half being ante-mortem in formation and connected to the musculi pectinati. Left side, mitral valve tubular in character, and constricted so as not to allow the finger to pass through, and ossific deposits on the attached margin of the valves. Aortic valves much thickened and uneven, one spot having the appearance as if there had been detachment of substance. Small shreds of fibrin were found entangled in the columnæ carnæ of the left ventricle.

Cranium, structure of brain and membranes, with the exception of the part affected, in a remarkable healthy condition, being well developed. On section only the left corpora striata was found altered, its substance being softened and presenting numerous small hemorrhagic spots irregularly disposed, the difference being well seen by comparison with the opposite corpora striata. The arteries of the base were as usual empty and their coats healthy, with the exception of the left middle cerebral and its branches, these latter were filled with a recent thrombus. From the transparency of the vessel the point of inspection of the embolus was well seen, being at the part of a lighter color and easily distinguished from the dark color of the thrombus which afterwards formed both in front of the embolus and in the branches of the vessel.

I have but few remarks to make concerning this case. The subject of embolism has been treated so extensively of late years that the facts recited explain themselves so that it would be superfluous for me to dwell at any length upon them. Whether the cardiac affection dated from the fever, or subsequently was due to the exertion of walking across the ice, the history does not show. No doubt the condition was considerably increased by the latter event, as the symptoms of following days would indicate.

No atheromatous degeneration of the vessels existed, so that the embolus must have been fibrine, its formation being due to the condition of the mitral valves favoring deposition of that substance. That the embolus had been formed on, and detached from, the aortic valves is proved by the absence of the murmur which had existed previous to the occurrence of hemiplegia. This murmur was peculiar, it was a soft burring sound as if the substance producing it was but slightly attached and therefore readily

thrown into vibration. Once detached, its course can be easily followed. Carried by the current of blood, its gravity would project it against the opening of the left carotid, and then up into the middle cerebral, one of the most common sites in which emboli are lodged. It was unfortunate that the embolus became impacted at the point where the small branches are given off which supply the corpora striata, thereby excluding the establishment of collateral circulation through them and suspending the function of the ganglion by anemia. Collateral circulation had occurred to a slight extent as shown by the improvement in the symptoms the day following the attack, and also from the branches of the vessel being entirely filled with a thrombus, as this latter must have been gradually formed from the blood derived by anastomosis. The want of nutrition and consequent degeneration soon destroyed all function. Hæmorrhage occurring, gave rise to the signs of compression; and it is astonishing that such small spots as here existed should give rise to such grave symptoms when it has been observed that large portions of the anterior or middle lobe may be destroyed by hæmorrhage without causing such serious effects. The clonic spasms are also interesting, as I find it stated that they are rare in cases of hæmorrhage confined to the cerebral substance. I would mention, in conclusion, a peculiarity in connection with the aortic valves; the post mortem showed that the valves were much thickened and uneven, yet after the occurrence of hemiplegia and the loss of burring sound, there was nothing to indicate that these valves were in any other than a healthy condition. This fact was noticed by Dr. Fuller, for after I had explained that such a sound as described had been there, he remarked that there was no murmur in that region now, that is at the time of the consultation.

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Acute Pleuritis, terminating in Suppuration—Paracentesis Thoracis. By CHARLES LAFONTAINE, L.C.P. and S.L.C., of Chambly, Q.

The characters of this disease are well described by authors, and the nature of the treatment is so well known, that I need not occupy space with them. I am, however, induced to send you brief notes of a case which in its results have been eminently successful. M. G., a miller by trade, aged 57 years, and of good constitution, came under my care, having been ill previously for four days with symptoms indicating inflammation of the pleura. He had had severe chills, with severe pain of a lancinating character on the right side of the

chest, difficulty of respiration. After a certain time he had several signs indicating the formation of pus. On examination, the right side was found swollen and cedematous. On comparing it with the opposite side of the chest it was obviously enlarged. There was dullness on percussion and absence of the respiratory murmur. The diaphragm was depressed and the liver considerably displaced, leading me, at one time, to think that there was considerable hepatic enlargement. The first week that he was under my care there was total inability to lie on the affected side. During the second week he only could rest on the affected side. The treatment having failed to produce absorption, I called in Dr. Godfrô Dubuc in consultation. We decided to puncture the chest at once. The patient having been placed in a proper position, the space between the sixth and seventh ribs was selected and an exploratory puncture made, which justified the diagnosis of suppuration having taken place. The trocar with its canula was at once introduced, when the pus flowed freely till six pints were withdrawn. From the date of the operation the patient improved rapidly, and is now perfectly convalescent.

Chambly, P.Q., November, 1873.

Acetate of Lead in Post partem Hemorrhage. BY
JOHN CHANONHOUSE, M.D., of Eganville, Ont.

On the morning of the 6th of July, I was called on about 2 o'clock to attend a woman in labor. Mrs. D, a Canadian by birth, is about 40 years of age, and the mother of eight children, the youngest being about two years old.

Arriving at the house, I found labor progressing rapidly, the os well dilated, the labia were everted, and parts swollen, and notwithstanding every advantage was taken by restraining the rapid advance of the foetal head, the patient was delivered at 6 a.m., having been just four hours in labor, the placenta following a few minutes afterwards.

After a lapse of ten minutes, and when hoping all would progress favorably, excessive hemorrhage set in, accompanied with cold extremities, pulse flagging, vomiting, &c.

The cold douse was applied to the abdomen, and ice introduced into vagina, but all of no avail, and a fatal termination seemed imminent if relief was not soon afforded, as the patient was rapidly sinking from loss of blood. In this extremity, and as a *dernier* resort, I administered one drachm of crys-

talized plumbi acetate, which I hoped would stay the hemorrhage, which it did.

In a few minutes after the medicine was given, the tissues of the uterus commenced to contract, and its sedative effects were visible in the system, and in a few weeks the patient was able again to attend to her ordinary duties.

Mrs. T. A., aged 32, the mother of six children. I was called to attend her on the night of the 14th of August; was only two hours in labor when she was delivered of a large male child; placenta followed, and immediately profuse hemorrhage set in, followed by the following symptoms: sighing, yawning, cold extremities, pulse wavy, weak, and continuous loss of color in face, lips blue, &c. I applied cold to abdomen, introduced ice into vagina, compressed aorta, and tried the usual treatment, and all proved abortive, when again I administered the three doses of crystalized plumbi acetate, and its happy effects were the same as the Canadian woman, Mrs. D.

From my experience I would strongly recommend the plumbi acetate in case of excessive hemorrhage after delivery.

Correspondence.

Editor of C. M. Record.

DEAR SIR,—I have read in the few last numbers of the London *Lancet* of a case where a chemist refused to dispense a prescription containing half an ounce of tincture of digitalis, for a patient suffering from delirium tremens, and the controversy it excited between the Medical and Pharmaceutical journals. The chemist refused, as he considered the dose excessive, and was not able to recognize the initials of the doctor, who, it appears, had only arrived in the neighbourhood. The patient died, and at the inquest some rather hard things were said about the druggists taking too much on themselves to discriminate what should and should not be. There is no doubt in this case, the druggist was wrong, as he should have asked the messenger who the medical man was, and then have communicated with him, before acting as he did. I readily admit any chemist has a perfect right to refuse to make up a prescription containing excessive doses of dangerous drugs, but at the same time it is equally his duty to put himself in communication with the doctor. There is no doubt there are a good many chemists that like occasionally to snub an unfortunate M.D. who has not been over-successful in this world, to

make amends for all the slights received from the big guns of the profession. The members of both professions should only be too glad to work harmoniously together, to do all in their power to further the progress of each other's scientific investigations, and not as they are now, in a quasi hostile position. It is just as well to look at facts in the face, and understand the true position of affairs. There are faults on both sides. Medical men must know there are a great many ignorant men in the profession, due to the fact that, instead of improving after graduation, they retrograde and become rusty. These men soon lose a good portion of whatever knowledge they learned at college. Chemists are in the same position, and are too apt to forget that most of the doses in the Pharmacopœias are smaller than what is generally prescribed. Then again, although a good many of them complain of the percentage system, they must remember that it first originated in their own body. If both sides would remember these things and work for each other's benefit, we would hear less of these annoyances that are continually occurring between the two professions. Now as to the half ounce dose of tincture of digitalis, it is a common treatment of delirium tremens in England, and one we have often seen employed in traumatic cases. The doctor was wrong to say the want of it killed his patient, as judging from the history of the case the man would have died at all events, but it would certainly have given the patient a chance of living. In order to set both sides before the reader, we may say that Mr. Hampson, at the recent British Pharmaceutical Conference, proposed that unusual doses of a drug should be initiated by the physician, insisting at the same time on the right of the pharmacist to decline to dispense unusually large doses of dangerous drugs. A committee of the leading chemists in England was appointed at the same meeting to draw up a report on the subject, which they have since done, and they suggest to physicians that the bracketed initial letters of the prescriber's signature written immediately after the unusual dose is the best suited to the purpose. It cannot be denied the druggist has daily a very responsible duty to perform, and to give some idea of this to our confreres, I may say a friend of mine, a druggist, was once employed in an establishment, where it was quite common to empty three or four bottles of Scheele's hydrocyanic acid per week at the dispensing counter, and in his own business now he dispenses 50 or 60 grs. of atropia sulph. in the same time. So that in judging this chemist at Ramsgate, the great responsibility on his shoulders

must not be forgotten. He has also, it appears, been supported in his action by the leading physicians and all the chemists of the place. In taking a general view of the relations of Pharmacy to the Medical Profession, and blaming severely as I must do, any encroachments of the druggist upon the domain of the doctor, and seeing as I frequently have done, cases of great ignorance on the part of pharmacists, I cannot but deeply regret the opposition which the many well educated druggists of this province have met with in their efforts to advance the standard of Pharmacy and provide a higher education for the rising generation. Two or three years ago, when two or three Montreal chemists went to Quebec praying the Legislature to grant a charter to the College of Pharmacy, and asking for licensing and other powers necessary to the carrying out of their plans, they were met with opposition from the Quebec medical men, and the College of Physicians and Surgeons through their president, Dr. Landry, and some of the board of governors resident in Quebec. In attacking chemists and druggists on the score of ignorance, we find our arms paralyzed by opposition such as this. The only reason I ever heard offered on the part of gentlemen engaged in thus keeping back the profession of Pharmacy is because of some obsolete medical act of a by-gone age, which the Druggists of to-day very properly refuse to comply with. This opposition has now nearly altogether vanished, thanks to the persevering efforts of the chemists, and they are now in a fair way of having a college of their own, and of being able to manage their own affairs in a way that will advance and raise their profession more to that standard which Pharmacy should have attained long ago in this Dominion. It should be the delight of every educated and well-meaning man in Canada, of whatever nationality or religion, to see educational institutions increase. It should also be his duty, particularly if possessed of influence, to aid them all he can.

I am, &c.,
JAS. PERRIGO, M.D.

Progress of Medical Science.

SOME OF THE CAUSES OF HÆMOPTYSIS.

BY HORACE Y. EVANS, M.D.

There is surely an event occurring in the general practice of medicine, except it be postpartum flooding, that so shocks and, to an extent, paralyzes the physician, as copious hæmoptysis.

Notwithstanding the conviction of the experienced that this hemorrhage rarely proceeds so far as to produce immediate death, yet, remembering that the blood is life, and to see that life, as it were, gushing from both mouth and nostrils, and that, too, from a being already chlorotic from a wasting disease in a vital organ, is sufficient to disturb the equanimity of the most deliberate.

This loss of blood may arise from various causes, and at various periods of health and disease.

The causes may be conveniently, and to a certain extent truly, divided into two classes,—those external to the body, and those internal, or arising as a result of a diseased condition. Of the first, we have mechanical injuries to the chest, such as penetrating wounds. During the late war of the rebellion this was not an uncommon event in the experience of many of us. So also from fracture of the ribs, spicule of bone penetrating the lung-tissue, the inhalation of caustic fumes and particles of irritating dust, as in the case of file-makers or those employed in grinding and polishing metals. It frequently results from excessive physical exertion, as in straining, or lifting heavy bodies. The forced retention of air in the lungs whilst the abdominal and thoracic muscles are rigidly contracting will, in many cases, produce either an emphysematous condition or a complete laceration of the viscus with its contained plexuses of arteries and veins.

Of the second class, catarrh may be named as occasionally causing hemorrhage; though the uncomplicated attacks usually traceable to this cause are of so slight a character that we are forced to the conclusion that the bleeding is from the vessels on the larger bronchial surfaces, and not from the lungs proper.

Another very fruitful cause of this hemorrhage, and one frequently not recognized, is disease of the left side of the heart. The defective mitral valve, with its indurated, contracted, and weakened segments, no longer protects the delicate lung-structures against the powerful contractions of the left ventricle, and, as a consequence, regurgitation takes place, thus keeping up a constant and forced dilatation of the pulmonary vessels. These sooner or later give way, producing the most annoying and obstinate attacks of hæmoptysis with which we meet. Indeed, there is no more unfortunate complication with which the consumptive can be afflicted than this same disease of the heart.

We have also what are called vicarious hemorrhages,—those following the interruption of habitual discharges, such as hemorrhoidal or menstrual. They are occasionally serious, yet by that remarkable law of accommodation in nature the vessels soon become reconciled to the excess of blood, and it flows on submissively in the natural channels. Notwithstanding the facility with which we can thus rationally account for almost every form of hæmoptysis, we usually associate its occurrence with an internal and far more grave disorder than any of which we have as yet spoken,—viz. the incipieny or full-fledged existence of consumption.

Authorities differ widely in regard to the rela-

tionship existing between this hemorrhage and the presence of tubercles in the lungs. Laennec, Louis, Rokitansky, Watson, Williams, and many of our own writers, associate the two as almost invariably dependent the one upon the other. Either the hemorrhage, by its subsequent clots, creates a local irritation, congestion, and inflammation, thus clogging the channels of nutrition, the lymphatic glands degenerate and are converted into tubercles, or the whole mass becomes cretaceous phthisis; or, on the other hand, fully-developed and softening tubercles by the ulcerative process open a pulmonary vessel and thus act as a direct cause of hemorrhage. Though these may be valid reasons for rejecting hæmoptysis as pathognomonic of consumption in the early stage, yet in the latter it becomes a direct result, pointing to softening and actual destruction of lung-substance. There are, undoubtedly, numerous instances in which hemorrhage has been frequent and copious without terminating in disease; yet it is a well-established pathological fact that in cases of tubercular cachexia there exists a fragile state of the blood-vessels not usually found in other diseases. This degenerating tendency, so characteristic of consumption, greatly favors, and is the only way of accounting for, this bleeding in the early stage, when the physical signs do not as yet indicate disease. We have often watched, and with a degree of certainty predicted, hemorrhage in the early stages of phthisis. The history and symptoms of such a case would be about as follows. An irritating, short, and dry cough, traceable to a slight cold contracted a few days previously; great oppression, difficulty in breathing, loss of appetite, thirst, continued fever; pulse rarely under 100; temperature from 100° to 104°; expectoration very slight, and of a saltish taste. Percussion-signs at first almost nil. Auscultation would reveal dry tubular sounds over a part of one or both lungs. Respiration rapid, with prolonged expiration. These symptoms would gradually become aggravated, continuing for several days, when, after an unusually severe attack of coughing, hemorrhage would commence. The relief following this occurrence sustains our explanation,—viz., the existence in the first place of tubercular deposits to an extent not as yet recognizable by physical signs nor incompatible with the normal functions of the lungs. But the catarrh awakens the fire; the flames spread rapidly to the miliary centres already existing, and upon the principle of *ubi irritatio ibi affluxus*, an active congestion results, and the degenerated and enfeebled blood-vessels, unable to endure the pressure, give way.

The main cause, however, in the advanced stage, and the one resulting in the most copious loss of blood, is the dilatation and thinning of the pulmonary blood-vessels. By some authors it has been named ectasis, or aneurism; but to the sight and touch in the cadaver it resembles the varicose condition often found in the veins of the lower extremities. In the process of softening and conversion of the tubercular or adenoid substance into pus, cavities are formed, through or on the walls of which the pulmonary vessels pass; by the loss of structure

they are exposed; the normal support of the lung-tissue is removed, and the vessels dilate and eventually burst.

This event may occur in the formation or emptying of each successive abscess. The progress of the disease to a fatal termination depends upon the rapidity with which one abscess follows another.

—*Philadelphia Medical Times.*

TREATMENT OF GLANDULAR AFFECTIONS.

Dr. F. PAGE ATKINSON gives (*Edinburgh Med. Journ.*, August, 1873) the following outlines of the treatment he has pursued for some years in glandular affections, and with satisfactory results.

In *Quinsy* he says: "I can predict with certainty that any patient will be quite well and able to resume his duties on the fourth day; whereas, by the old method of treatment, the disease lasted from nine to ten days. I do not know of a single instance in which matter has formed, except prior to the time of the patient coming under my care. The prescriptions I give are the following:—

"20 grains of bicarbonate of potash; 30 minims of the compound tincture of guaiacum; as much as is necessary of the compound tragacanth powder, in one ounce of water, and 15 grains of citric acid, in half an ounce of water. To be taken in a state of effervescence, three or four times daily.

"25 minims of the tincture of iodine, in an ounce of water, to be used as a gargle three or four times daily; three or four glasses of port wine in the course of the twenty-four hours, and as much beef-tea as the patient can take.

"The throat should be left uncovered, and poultices, steam inhalations, etc., should be particularly avoided, as also should the use of purgatives. In these cases there is generally a rheumatic tendency; and it will be found on enquiry that there has been excessive mental or bodily exertion prior to the attack.

"Quinsy is not the result of cold; for, if it were, laryngitis would be a more frequent accompaniment than it now is. As regards the treatment, I would remark that it must be carried out in its entirety, or the results expected will not be obtained. When suppuration has already commenced, order simply the iodine gargle, the port wine and beef tea, and omit all internal medicines.

"In the case of *Inflammation of the Breast*, give the following: 20 grains of bicarbonate of potash; 10 minims of spirits of nitrous ether; 10 minims of aromatic spirit of ammonia, in one ounce of water; and 15 grains of citric acid in half an ounce of water; and order to be taken, in a state of effervescence, every four hours.

"Apply to the breast an ointment consisting of three parts of the extract of belladonna, and one of iodine ointment. Keep the patient up with good, strong beef-tea, and if there is much fever, with a quick pulse, give port wine. The rationale of the treatment proposed is this: the effervescing citrate of potash, as stated above, acts as a febrifuge; the nitre relaxes the cutaneous vessels, and lessens the

quantity of fluid which keeps flowing to the breast; while the belladonna soothes pain, and the iodine helps the absorption of the lymph which has been thrown out. Where abscess has already occurred, give 30 minims of the perchloride of mercury solution, 15 minims of spirits of chloroform, 15 minims of dilute hydrochloric acid, 60 minims of compound tincture of bark, in one ounce of water, three times daily, and paint the breast with a solution of nitrate of silver [2 grains to the ounce of water.]

"I have rarely found it necessary to strap the breast, except when the abscess has been very deep, and the opening has taken place on the upper surface of the breast; and even in these cases strapping rarely proves of much service.

"In cases of *Inflammation of the Testis*, I order the effervescing citrate of potash, in combination with drachm doses of hyoscyamus. The testicle itself should be well supported, and kept covered with some lint dipped in a lotion of 15 minims of the tincture of opium and 15 minims of the tincture of belladonna to the ounce of water, and this again enveloped in oiled silk. This method of treatment will be found to lessen pain, and also the tendency to bubo. When the testicle becomes chronically enlarged, cover it with lint smeared over with blue ointment, and strap, and give the perchloride of mercury and bark internally. Where *Bubo* occurs by itself, give the effervescing citrate of potash and hyoscyamus internally; paint the enlarged gland with iodine; keep it covered with spongiopiline dipped in a solution of sulphate of zinc and alum (3 grains of each to the ounce of water), and enjoin rest. In both these cases, stimulants should be avoided, and the patient should only take a light diet. Barley-water may be recommended as a drink. Beef-tea, of course, should be freely given. Where the *pyrotid* becomes inflamed, give the effervescing citrate of potash and guaiacum, paint the gland with tincture of iodine, and then, when dry, apply a linseed-meal poultice which has been made up with a warm lotion, consisting of 3 grains of alum and 3 grains of sulphate of zinc, in one ounce of decoction of poppies. Port wine should be given according to the necessity of the case, and plenty of beef-tea. Where there is *inflammation of the absorbents*, I order the effervescing citrate of potash and ammonia, and keep the limb incased in a poultice made up as above. When there is *suppuration*, I find it best to prescribe 3 grains of muriate of cinchonia, 15 minims of the tincture of the perchloride of iron, and 15 minims of spirits of chloroform, in one ounce of water, three times daily; port wine or brandy, according to the requirement, and beef-tea, as much as can be taken.

"In the case of *Scrofulous Enlargement of the Glands*, give the syrup of the iodide of iron internally, with small doses of gray powder and powdered ipecacuanha, and paint externally with tincture of iodine; and the same treatment may be applied both internally and externally where there is an ulcerated surface. The local application of iodine certainly seems to effect more good than the nitrate of silver.

"Where there is *Enlargement of the Thyroid*,

apply a lotion constantly, consisting of 3 grains of alum, 3 grains of sulphate of zinc, 3 grains of sulphate of iron, to the ounce of water, and give internally the following mixture: 3 grains of the bromide of potassium, 60 minims of Parrish's chemical food, 10 minims of tincture of digitalis, water to the ounce—three times daily. Pancreatic emulsion is also of use in giving nourishment to the nervous system. Underdone meat and plenty of farinaceous food should be also recommended."

HOSPITAL NOTES AND GLEANINGS.

Remarks on cases of Vertigo, Reeling, and Vomiting, from Ear Disease. Under the care of Dr. HUGHLINGS JACKSON, at the London Hospital.

A man, thirty-one years of age, came to the out-patient room on August 1st, 1872, for attacks of auditory vertigo. The following account of his first attack may serve as a specimen. One day, about three months before his admission, he was, when walking home from work, attacked very suddenly by *swimming in the head*; he would have fallen, had he not sat down; he felt sick, and also very warm. A friend helped him, or he could not have walked home; when he looked at the ground it seemed to be going round. When home he took some carbonate of soda, and after this he vomited. He slept well all that night, and next morning felt well, except for a nasty taste in his mouth. He had several attacks of essentially the same kind afterwards. Such a set of symptoms coming on paroxysmally suggested disease of the ear. It is worth while mentioning that the patient said there was nothing the matter with his hearing; but, oddly enough, it was found that he could not hear at all on the right side; and, before the examination of it, it was plain that the right ear was very defective, as was shown by his promptly turning his head to place his left ear towards those who spoke to him. Twelve months before he had put a piece of tobacco soaked in rum into the right ear, for the relief of toothache. The syringe brought away a large plug of wax, with bits of tobacco. After this he heard very much better, but there was still some deafness. A plug of wax in the external meatus would be a sufficient cause for the attacks the patient had; but he had another attack, although a slight one, after the meatus had been thoroughly cleared out.

Such cases have long been described; they have been described very recently and most ably by Knapp (*Archives of Ophthalmology and Otology*, vol. ii. No. 1). But it is not widely known that ear disease gives a sufficient explanation of the group of grave nervous symptoms mentioned. The tendency is to put down the giddiness, reeling, and vomiting, to disorder of the digestive organs, and especially to some affection of the liver. But in the above reported case and in many others, there is no dyspepsia, and no evidence at all of liver affection. It is not denied that there is a *vertigo a stomacho laeso*; but it is asserted that, of the

numerous causes of vertigo, aural disease is a very important one. The "bilious vomiting" is what misleads so very often in diagnosis. Bilious vomiting is, however, of no particular value as evidence of disease of the liver. Bile will always be found in the ejecta after long-continued and urgent vomiting, however caused. And as to vomiting itself, it is a symptom which is found under the most different circumstances; it is found with cerebral tumour, renal calculus, Bright's disease, and, as we see, with aural disease. Those who would not accept the explanation of the dependence of vomiting, reeling, and vertigo on ear disease, are at any rate bound to examine the ears of the patients who suffer those symptoms; if they do, they will be struck by the frequent coincidence of noises in the ear, deafness, etc., with the paroxysmal occurrence of the symptoms mentioned.

The affection of the ear varies in its nature. Meniere, who first described this group of symptoms, supposed the semi-circular canals to be in fault. It is well known that the auditory nerve supplies two parts, the cochlea and the semicircular canals. The cochlea is for hearing, the canals (according to Goltz) for regulating movements of the head and trunk. It is certainly a fact that injury of these canals in lower animals produces disorderly movements, and, as stated, Meniere believed that injury of them by disease in man produces the disorderly movement of reeling (vertigo is rudimentary or incipient disorder of movement). But it is enough if the contents of the semicircular canals be interfered with indirectly; for example, if they be subjected to increased pressure from disease in the tympanic cavity. But, as Knapp says, the deafness shows that the cochlea must be affected as well; at any rate, the accepted theory is that the cochlea only is for hearing (Helmholtz supposes the cochlea to be the part for musical sounds, the semicircular canals for noises). Knapp has observed in some cases of Meniere's disease what he calls a contraction of the field of audition (analogous to contraction of the field of vision); there is, in other words, deafness for certain groups of musical sounds, and this, Knapp considers, is positive proof that the cochlea is implicated in addition to the semicircular canals.

Dr. Hughlings Jackson thinks that the function of the "canal" division of the auditory nerve is for the regulation of intervals of movements (for more automatic movements occurring in the intervals of a succession of voluntary movements). Hence the association with the other division for musical sounds; both divisions are in action in dancing to music. He believes that the symptoms of seasickness may be explained on the supposition that the contents of the semicircular canals are rudely dealt with in the unaccustomed movements of sailing on a rough sea.—*Lancet*, Sept. 6, 1873.

ERGOT IN THE TREATMENT OF NERVOUS DISEASES.

Dr. Daniel Kitchen, Assistant Physician to the New York State Lunatic Asylum, makes, in the

July number of the *American Journal of Insanity*, an interesting report of the action of ergot in certain nervous affections. He used the fluid extract prepared by Squibb, and the aqueous extract, or ergotine, made by Merck, of Vienna. The dose of the former is from one to two drachms; the latter from six to ten grains. One drachm of the alcoholic extract of Squibb's preparation is equal to about six grains of the ergotine. He also used a few ounces of a solid extract, made by Squibb, which is about equal in strength to imported ergotine. The full physiological effect of ergot will last from one-half to three-quarters of an hour.

"There is probably no condition so annoying to the patient as headache, and certainly it is the most common. In the following forms we have used ergotine with much benefit and comfort to the patient: 1. Headache, depending on plethora or fulness of blood; 2. Headache from anæmia; 3. Headache, depending on changes in brain substances and the membranes; 4. Epileptic headaches; 5. Migraine; 6. Headache, depending on disordered menstruation. The most common form of headache is the first, or that depending on a plethoric condition of the blood-vessels of the brain. Of course we cannot estimate correctly the amount of pain endured at each sickness, but it depends largely upon the constitutional character and nervous susceptibility of the patient. In plethoric headaches the course is either very short (a few hours at most), or they last for some days. The pain is usually referable to the back of the head, and there is much throbbing of the temporal arteries. In this class of headaches we have used ergotine largely; about one hundred patients have been prescribed for, and in almost every instance relief was given in less than half an hour, and the attack thoroughly cut short.

"In headache from an anæmic condition of the brain the blood-vessels are usually lax, and as a consequence there is a slowness of the circulation. Ergotine contracts the blood-vessels, thereby giving tone to the arterial system; the blood is forced more quickly and regularly through the brain, and of course in greater quantity. Our cases of cerebral anæmia are comparatively few, and experiments are therefore limited; yet in those cases where we have had an opportunity of using it happy results have followed. In epileptic headaches and in epilepsy we have used ergot largely. In *petit mal* there are muscular twitchings, congestions of the face, suffusion of the eyes, and a rush of blood to the head. We have in many of these cases been able to ward off the *grand mal* by large doses of ergotine. We have often combined it with conium, and it seems in this combination to work even more satisfactorily than alone, which is chiefly due, we suppose, to the sedative effect of the conium. In migraine, or sick-headache, we have distended blood-vessels pressing on the ophthalmic division of the fifth nerve, thereby causing the pain; and, if we accept this theory, then ergotine, by contracting the blood-vessels, will relieve the headache. In headaches depending upon some disordered condition of menstruation, we usually have a fulness or congestion of the cerebral

vessels; sometimes, however, it may occur from anæmia of the brain. In both forms the use of ergotine is beneficial."

Dr K, concludes his paper with the following statements: "1. Benefit of combination with bromide of potassium in epilepsy; 2. It is apt to produce cramps and pain in the stomach, which is remedied by combination with conium; 3. In nervous diseases it soothes all renal irritation and catarrh of the bladder; 4. It dilates the pupil sufficiently to be noticed; 5. Increases both frequency and tension of the pulse; 6. Has no appreciable effect on the heat of the body; 7. In large doses it produces the same effect as conium, by inducing sleep; 8. Its beneficial action in delirium tremens, after bromide of potassium has failed; 9. It combines readily in the form of a pill with sulphate of quinine; 10. It is a cerebral sedative; 11. Ergotine possesses an advantage over the alcoholic extract in not producing any pain or cramps in the stomach, and is given in smaller quantity; 12. Ergot is not likely to be adulterated, and we also secure an appreciable effect after its administration."

A NEW METHOD FOR HEALING ULCERS.

Dr. Nussbaum (*Wien. Med. Presse*, May 4, 1873) claims to have successfully treated upwards of sixty cases of chronic, extensive, and otherwise intractable leg-ulcers, by the following simple procedure. It is at least worthy of a trial. The patient is first narcotized, and then around the ulcer of the leg or foot, a finger's breadth from its margin, an incision extending down to the fasciæ is made; numerous blood-vessels are divided, and a severe hemorrhage ensues unless a fine pledget of lint be packed into the cut and the entire ulcer strongly compressed. The packing with lint is also necessary to prevent union of the cut edges by the following day. Upon the second day the bandage and lint are removed; from then until a cure is effected a simple water-dressing is applied.

The author states that an astonishing change can be seen, even in the first twenty-four hours: the ulcer, which yesterday threw off quarts of thin offensive, ichorous pus, furnishes to-day not more than a table-spoonful of thick non-offensive, healthy pus. The old ulcer becomes rapidly smaller, healing from the margin towards the centre, and is healed in a short time, but the cut is changed into a broad circular sore, which also speedily cicatrizes.

The great diminution of the secretion, and other favourable changes occurring in the ulcer, find an explanation from the fact that the circumcision has divided dozens of large, abnormally widened blood-vessels. Time is thus given for the lessened nutritive material, which previously was carried off by the excessive secretion, to be transformed into cells and connective tissue; in other words, granulations are formed, which fill up and heal the deep ulcer.

Without claiming this as a radical method, the author assures us that the cure is much more rapid, and the cicatrix becomes more elastic and resisting,

than in the ordinary means applied, which usually require so much time that the patients depart with half-cured ulcers, soon to find themselves in their previous deplorable condition.—*Medical Times*.

PHYTOLACCA DECANDRA IN THE TREATMENT OF INFLAMMATION OF THE MAMMARY GLANDS.

G. W. Biggers, M. D., of La Grande, Oregon, says, in the *American Journal of Medical Sciences*: The following cases are stated as the result of my experience only with the remedy in question, and I trust that others may try it and report the result.

Case I. Mrs. H., on the third day after labor with her second child; mammae commenced swelling, after an accumulation of milk. Did not see her until the symptoms were so urgent that there could be no mistake about the commencement of an abscess.

I pursued the antiphlogistic treatment, both general and local, until there was no promise of improvement; on the contrary, the case was continually getting worse. I then prescribed fluid ext. *phytolacca decandra*, gtt. xx. every three hours, in water. A very marked improvement took place in twelve hours, and in thirty-six hours the patient was well. There was also a suppression of the lochia, which was also re-established.

Case II. Mrs. B., whose child died a few hours after its birth, was attacked, after the secretion of milk took place, with inflammation of the mammary glands, from over-distension, and had the milk withdrawn very regularly, yet the case continued worse, threatening an abscess. I prescribed fluid ext. *phytolacca decandra*, gtt. xx. every three hours. Marked improvement in ten hours, and a complete recovery within thirty-six hours. There was also a suppression of the lochia in this case, which was re-established with the cessation of the mammary inflammation.

Case III. Mrs. G., at the fourth month of pregnancy, was attacked with inflammation of both mammae, severe pain, swelling, and very great heat, with severe rigors, amounting to a distinct chill. I prescribed fluid ext. *phytolacca decandra*, gtt. xv. every three hours in water. The symptoms all subsided, and the patient fully recovered within forty-eight hours, with no other treatment.

I have used the remedy above named in many other cases of mammary inflammation, and it has never yet failed in a single case.—*The Western Lancet*, August, 1873.

PHOSPHATIC FOOD IN DEBILITY.

Dr. Routh, of London, gives among others the following instructive cases in the *Medical Press and Circular*.

July 1, Rev. T. H. F., æt. about 60, has been a clergyman for many years, preaching with notes only, but lately has become confused while preaching, forgetting the thread; seems also to have experienced lately want of power to grasp subjects.

Recovers himself after a time, but the fear of this makes him very nervous; sleeps fairly, not troubled by dreams; lives in Cheshire, in a damp, cold neighborhood; loss of memory occurs frequently at other times than when preaching; no recollection, especially of names and figures; urine normal, no sediment; total loss of virile power; no backache, but a creeping sensation up from the nape of the neck; no loss of muscular power on either side; eye-sight weak; no indigestion; cannot digest lobster; first sound of heart rather prolonged, especially at base; bowels regular in London, more so than in country. Ordered Parrish's food, oyster and other shell fish, excepting lobster. As his teeth are bad, use a small digestive sausage machine.

July 31. Greatly better. Had profited greatly from the treatment. The mental faculties much improved. States is not the same man. He was now ordered allotropic phosphorus, g. x. daily, after his dinner. My last account from this gentleman was that he had completely recovered.

Mrs. Y., æt. about 42, consulted me in November last for loss of mental power and strength. The catamenia had stopped twelve months, and she too had a large family, with small means, and was much worried by creditors. Her memory is very defective, indeed, gone; she can't remember anything, nor when she puts away any articles of dress. When she has a good night she is rather better for a few hours, and then the same state recurs. She is always worse if she has had her attention forcibly called to anything; is very restless at night; her feet being drawn up as if she was going to have a convulsion; is become shockingly bad-tempered; will become violent on the slightest contradiction; feels very anxious and unhappy; bowels open; tongue clean; no leucorrhœa at present, although five months back she used to have them copiously for two or three days in lieu of the catamenia.

Ordered mustard to nape of neck; feet in hot water; half a drachm of bromide of potassium every night in water; sol. phosph. used m. x. *ter die*. A week after (November 12) was generally better, except that she had one bad day.

On the 19th she was better, but she stated that she had taken the bromide very irregularly, finding she could sleep without it, and the head was much less giddy.

This patient I saw for several weeks after. The treatment was interrupted by a bilious attack, which obliged me to suspend the phosphorus; subsequently it was resumed. She is now greatly better; feels that the phosphorus acts as a sort of tonic, or rather, as she expresses it, can't sleep without it. Memory greatly improved; some days not so good; but the intervals are longer, and generally her improvement is marked, and she is, in fact, convalescent.—*Medical and Surgical Reporter*, August, 1873.

DILATATION OF THE CERVIX UTERI IN DYSPMENORRHOEA.

Dr. John Ball recommends the following method of procedure in cases of constricted cervix uteri.

Having procured the thorough evacuation of the bowels of the patient, place her upon her back, with the hips near the edge of the bed, and when she is profoundly anæsthetized introduce a three-bladed, self-retaining speculum; seize the os uteri with a double-hooked tenaculum, draw it down towards the vulva, and then introduce a metal bougie as large as the canal will admit, following it in rapid succession by others of larger size, until one is reached which represent the size of the dilator. Then insert the dilator and stretch the cervix in every direction until it is enlarged sufficiently to admit a No. 16 bougie, which is all that is generally necessary. Then introduce a hollow gum-elastic uterine pessary of about that size, and retain it in position, by a stem secured outside the vulva, for about a week, in which time it has done its work and is ready to be removed. During this time the patient should be kept perfectly quiet, and usually upon her back. Dr. Ball claims that the operation saves a great deal of time, causes much less constitutional disturbance than the use of tents, and is not only safer than the metro-tome, but is free from some serious objections to the use of the latter, there being no resulting cicatrix to interfere with the dilatation of the parts, and the condition of the patient after an unsuccessful operation being no worse than before. He says that it relieves the constriction entirely, by breaking up all the adhesions, which are often firm and unyielding; that, acting as a derivative, it cures the hyperæmia of the cervix; and that, further, it establishes a radical change in the nutrition of the whole organ.

He details nine cases of stricture of the os and cervix complicated with vaginismus, chronic endocervicitis, version, sterility, dismenorrhœa, etc., in all of which very great relief or permanent restoration to health was effected by rapid and forcible dilatation. In a foot-note the editor of the *New York Medical Journal* quotes Dr. Ellinger, of Stuttgart as recommending the operation,—1, in stricture of the cervical canal; 2, stenosis due to flexions; 3, metrorrhagia in a flabby, swollen uterus, but without new growths; 4, retained catarrhal secretions; 5, for exploration of the uterine cavity; 6, replacement of a flexed uterus; 7, sterility. Dr. Ellinger declares that he has never had reason to regret rapid dilatation, and urges it, where dilatation is justifiable at all, to the exclusion of all other methods.

Treatment of Disease in Children. By EUSTACE SMITH, M.D., Lond., Physician to His Majesty the King of the Belgians.

There is one class of remedies which is of singular value in the treatment of the diseases of young children—viz., the alkalies. In all children (in infants especially) there is constant tendency to an acid fermentation of their food. This arises partly from the nature of their diet, into which milk and farinaceous matters enter so largely; partly from the peculiar activity of their mucous glands, which pour out an alkaline secretion in such large quantities. An excess of farinaceous food, therefore, soon begins to ferment, and an acid is generated, which stimulates the mucous

membrane to further secretion. In all chronic diseases, and in many of the acute disorders, this sour condition of the stomach and bowels is present. Alkalies are therefore useful—Firstly, in neutralizing the acid products of this fermentation; and secondly, in checking the too abundant secretion from the mucous glands. A few grains of soda or potash, given an hour or two after taking food, will quickly remedy this derangement and remove the distressing symptoms which arise from it. In the chronic diseases, indeed, attention to this point is of especial importance: for by placing the stomach and bowels in a healthy state, and insuring a proper digestion of food, we put the child in a fair way of recovery, and prepare the way for the administration of tonic and strengthening medicines, by which his restoration to health is to be brought about.

In prescribing for infants, an aromatic should always be included in the mixture. The aromatics are useful, not only for their flavouring properties, but also for their value in all those cases of abdominal derangement where flatulence, pain, and spasm, resulting from vitiated secretions and undigested food, are present to increase the discomfort of the patient. Such dyspeptic phenomena are usually relieved rapidly by the use of these agents; and aniseed, cinnamon, caraway-seed, or even tincture of capsicum in minute doses, will be found important additions to the prescription in all cases where alkalies are required.

In prescribing for children, the proper dose of a medicine cannot always be calculated according to the age of the child, and does not in all cases bear the same proportion to the quantity suitable for an adult. For certain drugs children show a remarkable tolerance, while to the action of others they show as remarkable a susceptibility. Thus, opium, it is well known, acts upon a child more powerfully than would be expected, judging from the mere difference of age. It should therefore be given to infants with a certain caution, especially if the child be enfeebled by disease. It is, however, a medicine which is of especial value in the treatment of the diseases of infancy, and may be given without fear if care be taken not to repeat the dose too frequently. Belladonna, on the contrary, can be taken by children in large quantities. A child of two or three years old will bear without inconvenience a dose which in an adult might produce very uncomfortable symptoms.¹ Lobelia, again, is a remedy which is very well borne by children. Dr. Ringer has given it to "very young children" in doses of five minims every hour, and in no case has he noticed any ill effects to follow its administration. Arsenic should be given to children over five years of age in the same dose as that used to adults, and infants of a month or two old will take one drop of Fowler's solution three times a day with great benefit in cases of gastric catarrh. The influence of mercury upon young children deserves remark. It seldom in them produces stomatitis or salivation; but an excess of the drug is not therefore harmless: its influence is seen in the irritation of the alimentary canal which

¹ It is important to remember this in giving belladonna for its sedative effects, as in pertussis.

it so often excites, and in the profound anæmia which it induces. The anæmia which is so common a sequence of constitutional syphilis in infants is no doubt often a result of too long-continued mercurial treatment.—*Med. Times and Gaz.*, April 12, 1873.

THE TREATMENT OF GALL-STONE.

By S. O. HABERSHON, M.D., F.R.C.P., Physician to and Lecturer at Guy's Hospital.

(*On the Pathology and Treatment of some Diseases of the Liver*, pp. 91, London, 1872.)

The treatment of gall-stone Dr. Habershon divides into that which is calculated to relieve the paroxysm; that which lessens the jaundice; and thirdly, that which is designed to prevent the recurrence of the attack. As to the first, the intensity of the pain calls for immediate attention, and by means of the hypodermic injection of morphia and the inhalation of chloroform we are enabled to afford considerable relief; these means are much more effective and better than the internal use of opium, which is with difficulty absorbed, and has sometimes been given in such large doses as to endanger the life of the patient. Externally hot fomentations may be applied, or, what is more effectual, the mixed chloroform liniment, belladonna liniment, and aconite liniment—half an ounce of the two first, and a drachm of the latter. If the bowels are confined, they should be acted upon by a free mercurial purgative and warm saline draught, or by an enema.

In hastening the removal of the jaundice, an unstimulating diet and gentle action on the bowels are the best means to employ; and the saline mineral waters are often of great assistance, but must be administered with caution. Alkalies may be used with advantage, not only in facilitating the discharge of inspissated bile, but in lessening duodenal irritation. It is of great importance also where other calculi are retained, and also where there much irritation to the pyloric region of the stomach and the first portion of the duodenum. Bismuth with alkalies is of some value in diminishing this gastric sensibility; but, whilst anæsthetics and anodynes afford immediate relief, and alkalies promote recovery, a great amount of patience is required by the medical attendant, as well as by the patient, lest the disease be aggravated by over-active treatment.

NEURALGIC PAIN IN THE LIVER.

By S. O. HABERSHON, M.D., F.R.C.P.

(*On the Pathology and Treatment of some Diseases of the Liver*, pp. 91, London, 1872.)

Neuralgic pain in the liver may, it is stated, arise from at least three different causes:—

“First, it may be a sensation of fulness and throbbing, and of distress at the scrobiculus cordis, which is due to distension of the right side of the heart. This state is relieved by mercurials with squill and digitalis; by purgatives and by diuretics; and in fact,

by any of those means which lessen the vascular strain on the right side of the heart.

“Secondly, the pain may be situated across the epigastric region, and is due to the gastric catarrh; the food is imperfectly digested, and becomes coated with a thick envelope of mucus; and flatulent distension is the result. The pain thus produced is often most distressing to the patient; the distension of the stomach impedes the action of the diaphragm, and embarrasses to a greater degree the crippled heart. Hemorrhagic erosion may also be induced, coffee-ground vomit. This symptom—pain—is lessened by the remedies already indicated, and also by the use of mineral acids, by nux vomica, by carbolic acid, etc., the diet being meanwhile carefully regulated.

“A third kind of pain is evidently of a neuralgic character; it is not angina pectoris, but it is abdominal; and I have noticed its locality as situated deeply behind the first part of the duodenum—severe, almost like gall-stone, but without jaundice or its other symptoms; it is not connected with the stomach, for it is not affected by food, but paroxysmal, and recurring sometimes with great regularity. The remedies we have mentioned may be used to their full extent; mercury even to the verge of salivation, digitalis till it can no longer be borne, purgatives may be used freely, and the anasarca removed by puncturing the legs; but still this severe neurosis continues; it appears to be due to exhausted nerve-function, and of those nerves of which we have already spoken. Narcotics and anodynes afford the only means we possess of palliating this distressing symptom.”

SCARIFICATION OF THE GUMS.

By J. LEWIS SMITH.

(*Treatise on the Diseases of Infancy and Childhood*.)

Dr. Smith says that the gum-lancet is now much less frequently employed than formerly. It is used more by the ignorant practitioner, who is deficient in the ability to diagnose obscure diseases, than by one of intelligence, who can discern more clearly the true pathological state. Its use is more frequent in some countries as England, under the teaching of great names, than in others, as France, where the highest authorities, as Rilliet and Barthez, discountenance it. It is well to bear in mind the remark of Trousseau, that the tooth is not released by lancing the gum over the advancing crown. The gum is not rendered tense by pressure of the tooth, as many seem to think; for if so, the incision would not remain linear, and the edges of the wound would not unite as they ordinarily do by first intention within a day or two. If there be no symptoms except such as occur directly from the swelling and congestion of the gum, the lancet should seldom be used. The pathological state of the gum which would without doubt require its use, is an abscess over the tooth. As to symptoms which are general or referable to other organs as fever and diarrhoea, the lancet should not be used if the symptoms can be controlled by other safe measures. All co-operating causes should

first be removed, when, in a large proportion of cases, the patient will experience such relief that scarification can be deferred. If the state of the infant be such that life is in danger, as in convulsions, or there be danger that the infant will be permanently injured or disabled, as by paralysis, every measure which can possibly give relief should be employed without delay. In these dangerous nervous affections, therefore, the gums, if swollen, should be lanced.

THE DELIVERY OF THE PLACENTA BY SUPRAPUBIC PRESSURE.

Judging from our own experience, and from the number of laudatory papers on this subject, Credé's method of delivering the placenta, or some slight modification of it, bids fair to take the place of every other. The plan which we adopt is as follows: At the maximum of the first uterine contraction after birth of the child, the fundus of the womb is grasped through the abdominal wall, between the thumb in front and the fingers behind. It is then to be both forcibly squeezed and at the same time pressed downward and backward. By means of this uterine expression the placenta and membranes are usually at once detached and extruded. Sometimes, indeed, they will suddenly pop out of the vulva, just as the stone escapes when a cherry is compressed between the finger and thumb. Occasionally it will require two or more pains to effect this; but the sooner this plan is resorted to after the birth of the child, the more easy in execution will it be. Those who, like ourselves, practice this method, contend that it offers many advantages over any other. The risk of communicating any puerperal disease is lessened. The expulsion of the placenta and membranes by a *vis a tergo* is more likely to be complete than by traction on the cord, which cannot be broken, as no traction is made on it. Adherent placenta is less frequently met with. The introduction of the hand into the womb is avoided, and so also as a consequence, is the ingress of air. Finally, the tonic and energetic contraction of the womb, following this manœuvre, prevents the occurrence of hemorrhage or of unruly after-pains.—*Goodell, in Transactions Med. Soc., Penn., June, 1873.*

OYSTERS AND THEIR PECULIAR DIGESTIVE PROPERTY.

MESSRS. EDITORS,—Recently, you had a paper from me about pepsin. While trying experiments with it, I was one day requested by one of our most experienced physicians to digest two oysters. I placed them, after thorough washing, with one grain of Sheffer's pepsin, four drops hydrochloric acid, and one ounce of water, in a test tube, and submitted to a temperature of 100° Fah. At the expiration of two hours, almost perfect solution had taken place, only four and a half grains remaining on the filter, and the residue was of a feculent character.

Thinking over this result, and the matter of eating raw oysters, I came to the conclusion that here we

have an organized being, with a stomach, &c., calculated to digest infusoria—as its food—and hence possessing a gastric juice; and if so, what should hinder that gastric juice from digesting even the oysters, itself, if submitted to the proper condition.

With oysters, as bought by the quart, there is so much liquor. On boiling a little of this liquor it coagulated, indicating so much coagulable albumen. I took another portion, of two drachms of this liquor one drop hydrochloric acid, and submitted to 100° Fah. for two hours. It remained perfectly clear, and on boiling a half of it, there was no coagulation, and, applying Fehling's test, there was the beautiful purple color produced, the whole indicating that there was in the liquor a natural element to produce the result. This experiment I have tried repeatedly; and, to make the matter still more conclusive, I placed one ounce of the filtered liquor in a flask, added to it 120 grains of thoroughly washed and wiped, solid part of an oyster, and five drops hydrochloric acid, and submitted to 100° Fah. for seven hours. On filtering, I had only 17 grains of solid matter left, thus showing that 103 grains of the solid oyster had been digested in one ounce of the liquor.

These facts are, I think, extremely interesting, and though my medical brethren have with me, ordered patients, on recovering from exhausting disease, oysters as a part of the diet, and may have done it empirically, it has, after all, been done under strictly chemico-physiological principles, without our knowing it.

Very truly yours,

E. H. HOSKINS.

Lowell, May, 1873. Boston Med. and Surgical Journal.

HYDROCYANIC ACID AS A REMEDIAL AGENT IN DELIRIUM TREMENS.

Dr. HENRY B. DOW expresses his belief (*Brit. Med. Journ.*, May 31, 1873) that hydrocyanic acid fulfils all the indications in delirium tremens better than opium, digitalis, or belladonna. "It allays the irritation of the stomach, and checks the nausea and vomiting; it quiets the nervous excitement, and, by so doing, tends to produce sleep; and it also controls the action of the heart. It has the advantages of producing its effects quickly, and of not being cumulative, and is taken readily by most people. I have used it with the most satisfactory results, and will now mention my usual method of administration. I give it in combination with bicarbonate of potash, chloric ether, and camphor mixture, in doses of one, two, or three minims of the Pharmacopœia solution every two, three, or four hours, according to the severity of the case; and also find that benefit may sometimes be derived from the addition either of three or four grains of carbonate of ammonia, or a few minims of the compound spirit of ammonia. The patient is to be nourished by the administration of beef tea, milk, etc., and wine or other alcoholic stimulants to be given, according to the discretion of the medical adviser; the less, however, the better. As soon as the worst symptoms have

been relieved by the above treatment, the appetite is soon restored by the use of dilute nitric acid and decoction of cinchona."

NEW YORK PHYSICIANS.—The *New York Medical Register* for 1873-74, contains the names of 1,974 regular physicians who are practising in that city and vicinity.

The *Philadelphia Medical Times* of November 29th, says: a most extraordinary instance of professional pride has just been given in Boston. Recently we chronicled the self-immolation of Obermeier, a young Berlin physician, upon the altar of science; but this time it is simply personal and professional pride that has brought about the tragic result, unless—as seems to us probable—there were some deeper, hidden springs of action. The story is that in the Boston City Hospital a young female nurse, named Pfyffer, on Tuesday, November 18, took opium with suicidal intent. Dr. Arthur L. Foster, the house physician, was called to her in the night, and mistook her symptoms for hysteria, prescribed, and returned to his bed. The next morning, on finding that his patient was dead of opium-poisoning, he went to the bath-room, and, locking the door, opened a femoral artery.

TINCTURE OF DIGITALIS AND CHLORAL HYDRATE IN DELIRIUM TREMENS (*Boston Medical and Surgical Journal*, October 16, 1873).—Dr. E. Chenery records the case of a Scotchman, aged 35, who, when first seen, had neither taken food nor slept for nearly a week, during which time he had been on a continuous debauch. His mind was greatly agitated, his muscular system in a state of unrest, and his pulse feeble and frequent. A strong mustard plaster was applied to the pit of his stomach, fifteen grains of chloral were given, and in twenty minutes twenty drops of the tincture of digitalis. These were retained, and in ten minutes thirty grains of chloral were administered, and were followed by three hours of refreshing sleep. A raw egg and some milk were then given, with another portion of digitalis, and in a short time thirty grains more of chloral. This time he passed off into a sleep of many hours, from which he awoke much relieved. Small doses of digitalis were continued for several days, partly to reduce the pulse, but principally for the sake of the eliminative action on the kidneys.

MAGNESIA AS A SURGICAL DRESSING.—Dr. Ohlmeyer, of Weissenburg, has found the carbonate of magnesia of value,—

1. In atonic ulcers.
2. In cases where the epidermis was eroded and the subjacent tissues were the seat of pain and were prone to subsequent suppuration.
3. In relieving the pain of inflamed wounds.
4. In cases where it was desirable to stimulate the affected surface, prevent the access of air, and limit the formation of pus. He was led in the first instance to try this remedy from its well-known action in those states of the stomach where there

is an excessive formation of acids. These latter, uniting with the base magnesia, are neutralized, and carbonic acid evolved. Accordingly, he believes that in exposed surfaces where the process of healing is prevented by fermentative action, this dressing is indicated. The use of it was attended with satisfactory results. The magnesia unites with the acids which form on the surface; it excludes the oxygen, forms an artificial covering, irritates the granulations, and forms a barrier against external and harmful agents.

In preparing the application he selects a fluid that will not readily oxidize. Oil answers this indication, and the kind he employs is the oil of sweet almonds. Adding to this the carbonate, he makes a tolerably fluid paste of salve. This is then spread upon linen and laid over the wound. It is held in place in the ordinary way.

Dr. Ohlmeyer also adds that he has used the carbonate successfully in facial erysipelas, when it was important to protect other patients from infection. In this latter case he used water as a substitute for oil.—*The Clinic, from Allg. Med. Central-Zeit.*, xlvii., 1873.

ADMINISTRATION OF PODOPHYLLIN (*British Medical Journal*, October 18, 1873).—A. E. Barret recommends the following formula when it is necessary to give podophyllin:

℞. Podophyllin, gr. ivss;
Extracti elaterii, gr. ivss;
Pulv. jalapæ comp., ʒvj.—M.

Half a drachm of this powder in half a pint of warm water acts most effectually, the cholagogue effects of the podophyllin seeming to be assisted by the hydragogue. Its use is not apt to be followed by constipation.

THE DIARRHŒA OF TEETHING CHILDREN.

Dr. W. H. DAY writes to the *British Medical Association*:—The treatment of diarrhœa in teething children is apt to be looked at from a one-sided point of view; the quickest way to arrest it. We have diarrhœa, 1, from dental irritation; 2, from indigestion caused by over and under feeding; 3, from atmospheric changes. Then, too, the diarrhœa may be of a simple inflammatory, choleraic, or dysenteric character; each variety demanding a different plan of treatment.

Astringents, as a rule, are to be condemned. The diarrhœa will continue in spite of them, unless other precautions are taken. If the motions contain mucus and are slimy, and there is a trace of blood and redness about the anus, chalk mixture and kino will be of no service, nor will bismuth, acids, or oxide of zinc. The diet is primarily at fault in these cases, and undigested food has passed into the bowels. Warmth and complete rest, with a dose of castor oil in such cases, is the most appropriate treatment, though the gums may require puncturing, and a grain each of hydrargyrum cum creta and Dover's powder may be necessary. Occasionally a quarter grain of calomel, with a grain of Dover's powder,

will be found of great value. Among hospital patients a large number of cases of diarrhoea are attributable to over suckling, and suckling by mothers in delicate health. The return of the catamenia is no hindrance to their nursing, or even menorrhagia in a mild or severe form. Remove all children suffering from diarrhoea from the breast, and let them have cow's milk diluted with lime water, previously warmed and given in a well rinsed bottle, and you will cure the diarrhoea.

Many children are reared entirely on Swiss milk, and this will now and then agree far better than cow's milk. Sometimes milk, in any form and however pure, will keep up the diarrhoea, and then cold barley water, or cold water thickened with isinglass will be necessary, or thin water arrowroot, to which a few drops of brandy may be added should the child be exhausted. Sometimes a powder containing two or three grains of rhubarb and carbonate of soda will neutralize the acidity which has resulted from the fermentative products of digestion, and set the little patients right with magical quickness. If the evacuations are free from mucus and blood, and there is no pain, a mild mixture of sulphate of magnesia and tincture of rhubarb may be prescribed in some cases with advantage. A drop of ipecacuanha wine in plain water, or mucilage and water, has been recommended, and it will often succeed.

Children are liable to diarrhoea at this season of the year from heat, and the excitement of traveling, and change from healthy country places or the seaside to the contaminated air of London.

TREATMENT OF BILIARY CALCULUS BY CHOLEATE OF SODA.

Schiff admits that these calculi are formed of cholesterol, not because this substance is formed in too great abundance, but because the bile does not contain the principles which maintain it in solution. These are the cholates and choleates of soda and potassa, more than the alkalinity of the bile which dissolves the cholesterol. Schiff therefore advises the administration of eight grains of choleate of soda, to be given twice daily, and increased until "saturation" is indicated by irregularity of the pulse, which becomes slow during repose and accelerated by the least effort. The dose may then be diminished, but not entirely suspended—a considerable time, a week at least, being required for the remedy to produce amelioration of the symptoms.—*Gazette Heb.*

TREATMENT OF CONDYLOMATA.

Dr. Boise destroys these small tumors with pure liquid carbolic acid, or in a very concentrated solution; he applies the caustic to the neoplasm with a pencil, taking care to spare the surrounding parts. Often, after a single application, the tumor becomes hard and blanched (mummified), and falls off without leaving any ulceration. It produces no inflammation if the surrounding parts are preserved, and the cure thus obtained is radical.—*Paris Médicale*, February, 1873.

TREATMENT OF NÆVI.

In a recent discussion before the Clinical Society of London, the President, Mr. Prescott Hewett observed that it was often a matter of difficulty to know when and when not to remove nævus. A large number might be safely left alone until they began to grow. They not infrequently die out. He referred to the case of his own son, who was, as a child, the subject of a nævus of the size of a walnut on the forehead. It did not increase up to the age of four years, when he had an attack of whooping-cough, during which the nævus disappeared.

Mr. John Croft referred to a case in which a nævus gradually disappeared. Whenever a white spot indicating atrophy was observed upon the nævus he advised it to be left alone. In others, enucleation was, he thought, often the quickest mode of treatment.

Mr. Barwell was of opinion that cutaneous nævi before puberty generally disappeared, and often, also, subcutaneous ones. Deeper ones, as a rule, however, did not spontaneously cease to exist.—*Med. Times and Gazette*, June 14, 1873.

SUBCUTANEOUS INJECTIONS.

Dr. Constantin Paul recommends glycerine as a dissolvent for subcutaneous injections. He considers it to be far superior to water, alcohol, etc.; it is neutral, can be kept easily, and is, of all liquids, the one which approaches the nearest to the composition of subcutaneous cellular tissue. Glycerine is, in deed, almost a normal substance for cellulose-adipose tissues.—*Lancet*, Aug. 2, 1873.

ADMINISTRATION OF PERCHLORIDE OF IRON.

Dr. H. L. Snow states (*Brit. Med. Journ.*, June 28, 1873) that the astringent metallic taste long remaining in the mouth after the administration of tincture of the chloride of iron, the flavour of which is not very imperfectly disguised by the syrup or spiritus chloroformi with which it is usually ordered, may be altogether obviated by the substitution of a small quantity of glycerine (about half-an-ounce to an eight-ounce mixture).

MISCELLANEOUS.

BURNS.

- | | | |
|----|---------------------------------|---------|
| R. | Yellow wax, melted and strained | 3 j. |
| | Linseed oil, raw, | 3 iiij. |
| | Tannin, | 3 j. |
| | Subnitrate of bismuth, | 3 j. |

Heat the wax in a clean tin vessel, add the oil and stir till they are thoroughly incorporated, then remove from the fire and stir till cold, adding first the tannin and lastly the bismuth. Apply on bits of patent lint to the surface of the burn, previously carefully cleansed.

TREATMENT OF ASTHMA.

DR. AD. D'ÉVOT (*Rev. de Thérap.*) gives some directions as to the remedies to be used in asthma. Twelve grammes of flowers of sulphur, with one gramme of tartarized antimony, are mixed with honey and powdered gum, and divided into sixty pills. Three of these represent the dose of Debreyne's powders, and one pill is given morning and evening.

Morning and evening a sheet of nitre paper may be burned in the bedroom or alcove of the patient. The paper may be prepared of white filter paper, dipped in a solution of nitre in the proportion of a drachm to an ounce.

TREATMENT OF PSORIASIS BY ACETIC ACID.

DR. BUCK (*Berlin Wochen. Prakt. Arz.*, 1873) has found the external application of acetic acid best of all in psoriasis. He first of all softens the skin eruption by soap and water baths and rubs off the epidermic scales with a soft brush. He then paints the spots affected with dilute acetic acid, so long as the patient will bear it. This is done frequently. No sear is left, and the treatment requires four to six or eight weeks. The same application is useful in warts.

IMPROVEMENT IN THE ADMINISTRATION OF PERCHLORIDE OF IRON.

Dr. Herbert L. Snow (*Br. Med. Jour.*, June 23) says that the metallic, astringent taste long remaining in the mouth after the administration of tincture of perchloride of iron may be completely avoided by the addition of a small quantity of glycerine, about half an ounce to an eight-ounce mixture being ordinarily sufficient.

In the same journal of July 5, Dr. Alex. Boggs, of Paris, recommends glycerine not only for this purpose, but also as an addition to remedies which have a tendency to constipate the bowels, its action being mildly aperient, and also on account of its solvent powers, which exceed those of syrups.

FRECKLES.

The following lotion is recommended for the removal of freckles:—

R Hyd. perchlor.....gr. v.
Acid hydrochlor.....gtt. xxx.
Sacch. alb.....i.
Spt. vini rect.....ij.
Aquæ rosæ.....vj.
M.

LOTION OF ACETIC ACID FOR BALDNESS.

The following lotion is said to be superior for a shampooing liquid, for removing dandruff, and

useful and pleasant application for baldness. It is, of course, moderately stimulating, and in those cases in which the hair-follicles are not destroyed, but have become merely inactive, we should think it might prove both efficacious and agreeable:—

Take of acetic acid..... 1 drachm.

Cologne water..... 1 ounce.

Water, to make in all.... 6 ounces.

M.

—Exchange.

SINAPISMS.

In making a mustard plaster, use no water whatever, but mix the mustard with the white of an egg, and the result will be a plaster which will "draw" perfectly, but will not produce a blister even upon the skin of an infant, no matter how long it is allowed to remain upon the part.—*The Medical Brief.*

GLYCEROLE FOR CHAPPING OF THE SKIN.

R Oxide of zinc.....gr. xx.
Tannic acid.....gr. xv.
Glycerine.....3 ix.
Tincture of benzoin. 3 ss.
Camphor.....gr. xv.
M.

REMOVAL OF GLASS STOPPERS.

It may not have occurred to every one—at all events it is not noticed in any of our treatises on practical pharmacy—that the easiest way to take out a stopper which has become fixed in the neck of a bottle is to reverse the motion given to it when putting it in, that is, to knock the stopper from right to left. In most instances when a stopper is fixed, without the intervention of an adhesive substance, it is by turning it as one would drive a screw. The direction is almost invariably from left to right, and thus a thread is formed, which it is easier to follow backwards than to break. The trouble with which the removal of stoppers is usually attended must form my apology for introducing a suggestion of so little apparent importance.

HOW TO SWALLOW A PILL.

The *Chicago Medical Times* is responsible for the following:—"Put the pills under the tongue and behind the teeth, and let the patient immediately take a large swallow of water, and he will neither feel the pill nor taste it. In fact, they cannot tell where it has gone, and I have seen them look about the floor to see if they had not dropped it."

INCONTINENCE OF URINE.

Dr. Holmes Coote, of St. Bartholomew's, recommends for incontinence of urine in children, one mi-

nim of creosote three times daily, combined with asafœtida and rhubarb pill, of each two grains.

TO DISGUISE CASTOR OIL.

Rub up two drops oil of cinnamon with an ounce of glycerine, and add an ounce of castor oil. Children will take it and ask for more.—*Druggists' Circular*.

FOR CHAFING OF INFANTS.

Take of powdered starch two parts, white oxide of zinc one part. Make a fine, well-mixed powder. Dust the abraded places with the powder, after proper cleansing.

FORMULA FOR CORYZA.

R Pulv. cubeb., ʒij;
Pulv. cupri sulph., gr. ij.—M.

In one box. Snuff up a small pinch about every two hours till relieved.—*Thomas Barrows, M.D., in Medical and Surgical Reporter*.

REMEMBER that a raw egg will clear your throat of fish-bones. Put one in a little hot wine, add some sugar, and the fish-bones will slip down all the easier. P.S.—You can take the egg, wine, and sugar, anyhow. They're good as a preventive; and you don't know what moment you may get a fish-bone in your throat.—*Druggist's Circular*.

HECTIC FEVER OF PHTHISIS.

The following prescription, known as Heim's pill, and recommended by Niemeyer, has been used with excellent results at Charity Hospital, New York:—

Pulv. digitalis, ʒ ss.;
Pulv. ipecac.,
Pulv. opii, aa grs. v.
Ext. helenii, q. s. u. f. pil. no. xx.

Consp. pul. rad. ind. flor. S. One pill three times daily.

THE USE OF CHLORAL AS A TOPICAL APPLICATION FOR BED SORES.

M. Martineau has found that the sloughing of the integuments over bony parts can be treated, if not prevented, by the use of a solution of chloral, 1 in 100 parts of distilled water. He lays this on with a feather and lint, and in a few days the wound heals.—*The Dublin Medical Press and Circular*.

LIQUOR PICIS ALKALINUS.

Dr. L. D. Buckley, of New York, gives the following formula for this preparation, which was originally devised by his father; R liquid pitch ʒij;

caustic potash ʒj; water fʒv. Mix and dissolve for external use. This mixes with water in all proportions, and only moderately discolours the skin. It dries rapidly and leaves very little stickiness. He has used it in all degrees of strength, and regards it as the best preparation of tar.—*Archives of Sci. and Pract. Med.*, Feb., 1873.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, DECEMBER, 1873.

A SMALL POX HOSPITAL.

The absolute necessity which exists for an hospital in Montreal specially devoted to the reception of small pox patients has been gradually dawning upon the public for at least the past ten years. When the present detached building at the Montreal General Hospital was proposed to be erected for the reception of small pox and other contagious diseases, there were many who raised their voices against it; and not a few to-day point to a realization of the views they then advanced. It is only within the last few years, however, that the City Council have had the idea brought before them, that upon them devolved the duty of providing the necessary accommodation for small pox patients. One year and a half ago the Health Committee seemed to realize that this idea was correct, and the initiatory steps were taken to place it in the old Military Hospital building fronting the St. Lawrence on Water Street. The uprising of not only those in the immediate vicinity, but of the entire population within a radius of at least half a mile, as well as the decline of the disease, the result of the house to house vaccination which was then set on foot, shelved the matter, till the fall the reappearance of the disease brought the matter again before the Council. After discussion it has been recommended that the sum of \$50,000 should be set apart to provide the necessary accommodation for small pox patients, but how to utilize the amount is the matter which is now giving rise to a very considerable discussion. For some reason, which we probably can imagine, but for which we can have no sympathy, the Health Committee

seem desirous of getting rid of the question altogether, and consider they have fully performed their duty when they have recommended the sum of \$50,000 for this specific purpose. For somewhere near half this amount the *Communité* of the Hotel Dieu have offered to erect upon their property an isolated building for the reception of small pox patients, and to maintain them at their own cost. It has, therefore, been proposed that this \$50,000 should be nearly equally divided between the Hotel Dieu and the Montreal General Hospital. From what we have just said, it appears that the authorities of the Hotel Dieu are willing to accept their proportion, but so far as we are aware no authentic expression of opinion has been made by those competent to act on behalf of the Montreal General Hospital. As regards the former institution we are unable to speak, but presume from their great wealth, they would not have any difficulty in carrying on the Small Pox Hospital. As regards the Montreal General Hospital, we do feel that the additional expenses which they would have to incur in the management of a separate hospital for small pox patients is a burden which its Committee, or Board of Governors, have no right to throw upon the shoulders of those who in the past and in the present have been the mainstay of that Institution. We therefore believe that they would not be justified in accepting any proportion of money which may be offered them for such a purpose. Indeed, we do hope that, upon calm reflection, the good sense of the authorities of both Institutions will induce them to refuse this proposed division, and unite in recommending the erection and maintenance by the city of—not a large small pox hospital—but a series of pavillions, upon the outskirts of the City. In this way the unfortunates who might be stricken down with the disease would be placed under circumstances, where, with medical treatment and the latest and best sanitary arrangements, their prospect of recovery would be at a maximum. This matter has, as we have already stated, created considerable discussion, not only in the council, but in the daily press by means of editorials and correspondence. So far as we have been able to trace the matter, only two objections which are at all likely to have weight have been advanced against it. One is, that only indifferent catholics would enter an institution where they could not at all times be surrounded by the outward emblems of their religion. Now, although this objection is urged by one who signs himself “a member of the Sanitary Committee,” and therefore presumed to be blessed

with a little more than average intelligence, we pronounce it a base slander upon the 28,000 Roman Catholics who have since the opening of the Montreal General Hospital, been admitted within its walls. In that Institution the Roman Catholic clergy, with their worthy sisters of charity, have as free ingress as they would to any Roman Catholic house in the city of Montreal or elsewhere, and in the name of common sense, what more is it possible to grant; yea, what more is it possible to ask for? To attempt to argue the point is hardly worth the time it takes. Incidents of every-day life disprove it, for in fatal cases in hundreds of families, who are good and devoted Roman Catholics, we have known the attendance of clergy and sisters to have been just what we have seen, time and again, bestowed upon the poor, and, in many cases, friendless patients of the Montreal General Hospital. This argument then is worthless. The only objection of any weight, in our opinion, which has been urged, is the fact that to place the hospital under a committee of the City Council would be to open up an avenue for jobbery and the exercise of undue influence, and a number of other petty grievances which it is needless to detail. We are free to admit that there is a certain amount of possibility, and even probability, that such might occur; but that would not prevent the hospital performing its allotted work, although it might cost the city a little more for maintenance. The city conducts through its council committees many important works,—its Road, Police and Water departments are conducted by committees, and if we are willing to entrust them with duties so important, and involving the spending of an immense amount of money, surely it is “swallowing a camel and straining at a knot” to say, that the conduction of an hospital, involving possibly at the outside, an outlay of \$20,000, cannot be entrusted to any committee of the Council. But if such should be the opinion entertained, what is to hinder the institution being placed in the hands of commissioners. It is an old adage, “that where there’s a will there’s a way.” We sincerely hope that the Council will have the will, and will find the way to establish a series of small pox pavillions, that they will be managed by the city, and that into them will be admitted all creeds and nationalities. Medicine is universal—she knows no boundaries, no creeds, no nationalities. Why then this discussion. In the name of the great majority of the profession in Montreal we protest against it.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

This Society, after nearly a year's consideration upon the subject, has adopted a tariff which, while it places a fair increase upon the fees for attendance upon the better classes, yet deals gently with those who are in a humbler position. We think that no one at all conversant with the fact, that the rates which have heretofore been charged were adopted fully thirty years ago, but will admit that the rise which has taken place in the price of the great majority of the necessities of life justified an alteration in the tariff. We have heard many expressions of satisfaction that this result has, after much labor, been arrived at.

A move, equally important as the above, was made at the meeting of the Society, which was held on the 28th November, when by unanimous resolution, the Secretary was instructed to provide a book, (locked) into which members could enter the names of those who systematically and persistently defraud the profession. Writing as we are for the professional reader, it is stale news to say that there are a great many persons who never pay their doctor, and who yet manage to get the very best of attendance. They seldom continue more than two years with any one physician, and then pass on to the next, who, not knowing the true character of his new patient, receives him with open arms. Without going to the physician lately dismissed, the newly installed one is unable to get any information concerning his new client, and the reason assigned by the patient for the change is swallowed with an avidity, which, on the part of some, shows a digestion for that kind of thing which is really surprising. This new book will alter all this. It will regularly be open at the meetings of the Society for the inspection of members; and if in future they accept as patients, without some guarantee of payment, those whose persistency in defrauding others has caused their names to appear on this black list, they do it with their eyes open, and the profession will know how to treat them. This is a matter which those who may be conservative in their ideas, may look upon, perhaps, as making the profession mercantile in its character. To such we would reply, that we are exceedingly apt to forget that our profession has any side which may be termed mercantile, as we believe it has. No one ever goes to practice medicine as a pure philanthropist; and while we are sure the profession will ever show its generous side, and willingly extend relief to the poor, we think that in justice to those depending

upon us, those who are able to pay and don't should be so branded. This move marks a new era in the profession at Montreal, adopting, as it does, a principle in professional transactions, which much as we commend it, we readily confess would have made those whose footsteps we now tread in, open their eyes with astonishment.

MATERNITY HOSPITAL, MONTREAL.

This hospital is now in full working order, having been incorporated as the Lying-in-Department of the Female Hospital of Montreal, a charter for which was obtained a few years ago by Drs. Hingston and Leprohon, of Montreal, and Dr. Chapman, of New York. A number of accouchements have already taken place, and several are awaiting confinement. Its sanitary condition has been excellent. Medical men at a distance, who may have cases which require treatment in an institution of this kind can have them accommodated at various rates, according to accommodation.—*See Advertisement.*

TO CORRESPONDENTS.

We receive a great many letters from correspondents throughout the country, on matters where they alone are interested. So far as able we reply to them and post pay our letters. These communications have now become so numerous that their postage bill is getting a considerable item. As heretofore, we will willingly reply, but must insist upon a stamp being enclosed to pay the postage of it.

THE IODO-BROMIDE CALCIUM COMPOUND.

The reputation which the house of Tilden & Co., of New Lebanon, N. Y., have sustained for a great many years as thoroughly reliable manufacturers of a very large number of Pharmaceutical preparations, induces us to look with a favorable eye upon any preparation which they may present to the notice of the profession. A couple of years ago they introduced a most excellent disinfectant, styled Bromo-Chloralum, the value of which we can thoroughly attest from a somewhat extensive use of it, especially within the last year. It is the most prompt deodorizer we have ever used, and it has the wonderfully excellent quality of not substituting a disagreeable smell for one which was disgusting; on the contrary, after it has been freely used

the atmosphere *tastes* sweet and pure. In the atmosphere of small-pox patients, we would consider it extremely useful, destroying that odor which is so characteristic of the disease. The latest preparation which Messrs. Tilden & Co. have presented to the profession is that, the name of which heads this notice, viz., the Iodo-Bromide Calcium Compound. We have had no experience as yet of the beneficial results which are said to follow its employment in cases which seem to be particularly benefited by it—such as chronic cases in well-marked scrofulous constitutions. The reports, however, which have been made by well-known members of the profession in the United States, are so unanimous, as to the excellent results which have followed its use—that it is not to be wondered at that the profession in Montreal have determined to give it a trial. We know a great many who are using it, and we are assured that the results will corroborate the experience of our American brethren who have prescribed it for about three years.

We desire also to say a word as to Tilden's Fluid Extracts; we have used them for eleven years, and have never known them to fail us. We cannot say more in their favor, were we to fill pages.

DISEASE MISTAKEN FROM DRUNKENNESS.

The November number of the *Canada Medical and Surgical Journal* mentions a singular case. The facts are as follows: A sailor having arrived in port, and suffering from unmistakable symptoms of locomotor ataxy, left his ship to make his way to the Montreal General Hospital. On route he was seized by a zealous policeman, and in spite of remonstrances was taken to the Station House, and was charged with being drunk. On the following day, at the Recorder's Court, in consequence of his being considered still drunk, he was condemned to a fine or a month's imprisonment, which, as he was unable to pay the fine, he was compelled to undergo. On his release he proceeded to the Hospital, where, the *Journal* says, the man is now under treatment for the disease. We confess that, were the story not given on so creditable an authority, we would be inclined to doubt it, for it does seem improbable that a sailor of a ship who left his vessel to go to the hospital, and on the contrary made his way to the gaol, should not have been

looked after by his captain or his shipmates for such a length of time—that he was allowed to pass a month in prison on a false accusation. If all the facts are as stated, it is positively disgraceful to the authorities. At all times the greatest care should be exercised to discriminate between intoxication and disease, for in Police annals many lives have been lost in consequence of the one being mistaken for the other. When there is the least doubt a physician should be called in. We trust for the credit of Montreal, some explanation of this matter can be given.

DEATH OF SIR HENRY HOLLAND, BART., M.D., DCL. F.R.S.

The death of this distinguished man took place in London, on October 29th. He belonged to the generation that was in its prime when Scott, Byron, and Wordsworth still flourished, and was the physician or friend, and in some instances both, of Campbell, Moore, Rogers, Lord Grey, Lord Lansdowne, Lord Brougham, Earl Russell, Macaulay, Sydney Smith, and others whose names will go down to posterity. He was with Mr. Canning, Prime Minister of England, during the last two days of his life. It was then that Canning said to him, "I have struggled against this long, but it has conquered me at last." He repeatedly saw Lord Byron in London society, and says of him:—"His presence made the fortune of any dinner or drawing-room party for which it could be obtained, and was always known by a crowd gathered round him, the female portion of which generally predominated. There was a certain haughtiness in his manner of receiving the homage tendered him, which did not, however, prevent him from resenting its withdrawal." The autobiographical sketch from which this quotation is taken was prepared for his children in 1868, and in it he alludes to this remarkable linking of the associations of several generations thus:—"A memento of this passage from one generation to another occurred to me but a few weeks ago, when Lord Stanley happened to be dining alone with me. It astonished him to learn, as in some sort it did myself to relate, that I had frequently attended his great-grandfather (the eleventh Earl of Derby) some forty-five years ago.

Sir Henry was the eldest son of Peter Holland, Esq., and was born at Knutsford, Cheshire, England, October 27th, 1788, and had just entered on his eighty-sixth year when he died. He graduated

at the University of Edinburgh in 1811, and soon afterwards he made a tour of Greece and the Ionian Islands, of which he published an account in 1815, under the title of *Travels in Albania and Thessaly*. On his return to England, he established himself in London, and soon attained a prominent position in the medical profession. He was appointed Physician in Ordinary to the Princess of Wales, afterwards Queen Caroline, in 1814, to Prince Albert in 1840, and to Queen Victoria in 1852. He was made a Baronet in 1853. He was successful from the very outset of his professional career, and it was his good fortune to find himself placed in the midst of the most agreeable society in London. He was one of the famous "set" which made Holland House illustrious. His observation of the world was not gained alone by association with the eminent men of England. He made it a constant practice to spend two months every year in foreign travel, even in the period of his greatest professional activity, and there are few interesting countries, except in the far East, which he had not visited. He made eight or nine voyages to the United States, and on the last, in 1869, was accompanied by his son. In the sketch alluded to above he recalls memories of these journeys. "I have come back each year refreshed in health of body and mind, and ready for the ten months of busy practice which lay before me. On the day, or even the hour, of reaching home from long and distant journeys, I have generally resumed my wonted professional work. * * * Returning from America, I have more than once begun a round of visits from the Gaston Station." The habit of making a yearly journey to some foreign country seems to have been fixed upon Sir Henry Holland. On his last visit to this country he was in his eighty-second year, and he went as far as St. Paul, Minn., while he had already traversed 30,000 miles of this continent.

The past summer he as usual took his autumnal trip; this time going to the continent. On his way home he contracted a cold, and eventually Pneumonia supervened. He expired shortly after he reached home, full of years, and full of honors.

Among his medical works are *Medical Notes and Reflections*, which has been reprinted in the United States, and *Mental Physiology*.

The following books have been received from Messrs. Lindsay & Blakiston, Philadelphia, and will be reviewed in our next: Dr. Agnew on Lacerations of the Perineum; and Dr. Roberts' Practice of Medicine.

EISHOP'S COLLEGE MEDICAL SCHOOL.

The students of this school held their annual dinner at the Carleton Restaurant on the 26th November, Mr. D. A. Hart being in the chair. Several of the graduates and friends of the students were present. We hear that the graduates intend organizing a Graduates Society, and having annually a graduates' dinner.

LONDON, ONT., MEDICAL SOCIETY.

A subscriber has forwarded to us a very neatly printed copy of the Bye Laws and Code of Ethics of the above Society. It also contains a tariff of charges for professional services, adopted by them, and which by the bye laws is most obligatory upon its members. In this way it is hoped that the profession of that city will avoid the habit of under-bidding for patients, which we regret to say is too common. We heartily endorse their action, and hope that the good example set by London may spread.

We have to apologize for the late appearance of this number. It has caused us very great annoyance, but we were quite unable to prevent it. The fault was not with us, but with the Printing establishment, which had work crowded upon it in a manner quite unparalleled. We are promised that this delay will not occur again.

Just as we are going to press, we learn, with feelings of the deepest regret, that Dr. Smallwood died on Monday morning, the 22nd of December.

PERSONAL.

The many friends of Dr. Fenwick, of Montreal, will learn with regret that he has been confined to the house for several weeks with an attack of acute nephritis, resulting from exposure in discharge of his professional duties. At the time of our writing he is progressing favorably, having several times been out of bed. We hope soon to be able to announce his entire convalescence, although from the nature of the disease, it must be some time before he can safely resume the active duties of the profession.

The profession, and hundreds outside of the profession, will hear with sorrow that Dr. Charles Smallwood, of Montreal, has been obliged to discontinue his active professional duties, and is at present confined to bed with ascites. As the disease does

not show any signs of increasing, we hope that shortly we shall be able to inform his many friends of his entire recovery.

Dr. Irvine D. Bogart, (McGill College, 1860,) is in practice at Campbellford, Ont.

Dr. Napoleon Leclaire (McGill, 1860,) has removed to Montreal from Lancaster and commenced practice. He was recently elected a member of the Médico-Chirurgical Society of Montreal.

We understand that Dr. Henry Harkin (McGill College, 1867,) who ever since his graduation has been employed on the Montreal Ocean S.S. Company's (Allan line) Mail Service as surgeon, has just resigned his position. During his term of service we happen to know he was universally respected as an able and painstaking physician. We hear he intends to commence civil practice.

Dr. Henry Usher (McGill, 1861), is in practice at Walkerton, Ont. We were glad to hear from him the other day, and wish him increased prosperity.

Dr. Sparham, of Brockville, was in Montreal a few days ago on a brief visit.

Dr. Simpson of Montreal, (McGill College, 1854,) has been appointed to attend the Small Pox department of the Montreal General Hospital.

Dr. Wickwire, (M.D. Edin.,) of Halifax, has been appointed Vice Consul of the Netherlands, for that part.

Dr. John W. Bligh (M.D. McGill, 1865,) has just returned to Europe, after a brief visit to his relation, Dr. Marsden, of Quebec.

Dr. J. H. Fulton, (M.D. McGill, 1863,) after practising in the Western States for several years, has become a homœopathist, and is located now in Montreal.

Reviews.

Contributions to Practical Surgery. By GEORGE W. NORRIS, M.D., late Surgeon to the Pennsylvania Hospital, Philadelphia. Lindsay & Blakiston, Philadelphia, 1873. Montreal: Dawson Bros.

This book is a collection of essays, principally upon the various fractures and the unfortunate results which supervene. Several of them have appeared in the *American Journal of the Medical Sciences*, and were very favorably noticed. This induced the author to have them collected and presented to the profession in a more endurable

form. We think that the chapter upon non-union after fractures is the most valuable, and perhaps, also, the most practical. It embraces fully one-third of the volume; and it seems to us if he has not fully exhausted the subject, he has at all events collected a great deal of practical information. Fortunately this result is one that seldom occurs; yet it may at any moment happen to a surgeon, and it behoves all to know how to act under such circumstances, in the way calculated to be most beneficial to the patient. In the Pennsylvania Hospital, of which Dr. Norris was one of the surgeons, in the interval from 1830 to 1850, two thousand one hundred and ninety-five cases of recent fracture were admitted, and in not a single instance was there non-union. During the same period eighteen cases of ununited fracture were admitted as such. This experience is very satisfactory, and, so far as our knowledge goes, corroborates the experience of Montreal Hospital practice. The only cases of ununited fracture that we have seen, having been admitted as such. After noticing some twenty-two different plans of treatment which have been suggested, and reviewing each, he compresses them into the following five, as being what are most generally resorted to: 1, Compression and rest; 2, Fractures; 3, Seton; 4, The application of caustic to the seat of fracture; 5, Resection of the end of the bones. He furnishes a great deal of statistical information on the subject, and gives the following conclusions:

"1st. That non-union after fracture is most common in the thigh and arm.

"That the mortality after operations for its cure follows the same laws as after amputations and other great operations upon the extremities, viz., that the danger increases with the size of the limb operated on, and the nearness of the operation to the trunk; the mortality after them being greater in the thigh and humerus than in the leg and forearm.

"That the failures after operations for their relief are most frequent in the humerus.

"That after operations for the cure of ununited fractures, failures are not more frequent in middle-aged and elderly than in younger subjects.

"5th. That the seton and its modifications is safer, speedier, and more successful than resection or caustic.

"6th. That incising the soft parts previous

to passing the seton augments the danger of the method, though fewer failures occur after it.

"7th. That the cure by seton is not more certain by allowing it to remain for a very long period, while it exposes to accidents.

"That it is least successful on the femur and humerus."

The other papers are all interesting and display a really great amount of labor, especially as regards statistics. The work is one which, while it will be found of interest to all, is of especial value, and should be found in the hands of every hospital surgeon.

Lectures on Diseases and Injuries of the Ear. Delivered at St. George's Hospital, London, by W. B. DALBY, F. R. C. S., M. B., Aural Surgeon to the Hospital,—twenty-one illustrations. Philadelphia: Lindsay & Blakiston, 1873. Montreal: Dawson Brothers.

Diseases of the ear are the torment of a general practitioner's life. This is due partly to the fact that they are met with to a great extent in children, whose tympanum it is difficult to get a glance at,—owing to the construction of the ear in such young subjects, and the restlessness of their nature; also the fact that many of the treatises upon this special department of surgery are so voluminous, as to be perfectly useless to one whose time is fully occupied by general practice.

This difficulty is fully met in the little volume of two hundred small pages, where, in an easy, off-hand sort of way, the principal diseases of the ear are described and the appropriate treatment mentioned. We have examined it pretty thoroughly, and we can recommend it to our friends as a *multum in parvo*.

Diseases of the Mastoid Process. By A. H. BUCK, M.D., New York.

Dr. Buck believes cases of this disease occur with tolerable frequency in ordinary practice, and that the mortality has been large from the condition being unappreciated. He asserts that in the majority of cases it arises *in situ* and not by extension. Dividing the subject into five headings, he details twenty-four cases in illustrating the diagnosis, pathology and treatment of each variety, and gives a table showing the successful results of operative interference. Issued in pamphlet form. It is a useful addition to the literature of Aural Surgery.

Medical Items.

TO RESTORE COLOR TO FABRICS.

When color on a fabric has been accidentally or otherwise destroyed by acid, ammonia is applied to neutralize the same, after which an application of chloroform will, in almost all cases, restore the original color. The application of ammonia is common, but that of chloroform is little known. Chloroform will also remove paint from a garment, or elsewhere, where benzole or bisulphide of carbon fails.—*American Artisan*.

The student who was asked the use of starch in germination, and who replied that, "In the German nation, as elsewhere, starch is used for doing up linen and similar laundry purposes," intends to take an extra course of botany during summer vacation.—*Boston Journal of Chemistry*.

OXIDE OF ZINC FOR NIGHT-SWEATS.

The most ancient and venerable remedy for night-sweats is aromatic sulphuric acid, in infusion of cinchona, or serpentaria, etc. According to the *Pacific Medical and Surgical Journal*, the best remedy is the following:—R Oxidi zinci, gr. xxx.; Ext. hyoscyami, gr. xv.; M. f. pil. x; Sig.: Take one at bedtime.

The nativity of Adam is not a matter of doubt with the Darwinians, who believe him to have been a germ-man.—*Boston Journal of Chemistry*.

Lice may be effectually destroyed by washing with an infusion of larkspur (*Delphinium*). A remedy which, while prompt in its action, is entirely devoid of danger,—as much cannot be said for some of the other parasiticides.

Sir James Paget says the best wash for hardening the skin to prevent bed-sores, is one part of sweet spirits of nitre to three parts of water.

BIRTHS.

At Fleetwood Farm, Lachine, P.Q., on Sunday, 24th November, the wife of Dr. William Mackay, of a son.

At Orona, Ont., on the 23rd November, the wife of Herbert Renwick, of a daughter.

MARRIAGES.

In Montreal, on the 11th November, at the residence of Dr. Wm. Fuller, by the Rev. J. T. Pitcher, Murray Pettit, Esq., to Ella, second daughter of Dr. R. Fuller, Grand Rapids, Michigan.

DIED.

In Montreal, on November 23rd, Marie Louise, aged 13 years, child of Edmond Robillard, M.D.

On the 10th November, at her late residence, East Hawkesbury, Elizabeth Everett, widow of the late C. M. Everett, M.D., aged 62 years.

On the 14th November, at St. Johns, P.Q., of typhoid fever Charles Hugh, son of R. H. Wight, M.D., aged 25 years.

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Original Communications.

A case of Cerebro Spinal Meningitis. By E. H. TRENHOLME, M.D., Professor of Midwifery and Diseases of Women and Children, Bishop's College, Montreal.

(Read before the Medico-Chirurgical Society of Montreal, January 23rd.)

The following notes of a case of this fatal and somewhat recent disease, is brought under your notice as an illustration of the course and pathological conditions met with in a most severe form of the disease:—

The subject of this disease was a strong, well-developed, healthy little girl, 3 years of age, the daughter of healthy parents of Irish extraction.

The child was taken ill on the 1st of June, but it was not till 9 p.m. on the 2nd of June, that I was called to attend her. She was very restless, vomiting occasionally. Pulse 165; skin hot and dry; bowels and bladder all right; pupils of both eyes normal, and no head symptoms. Gave the child tr. aconite and digitalis to control the action of the heart and relieve the skin.

3rd June, 11 a.m. Passed a good night; the febrile symptoms having abated shortly after midnight; had slept for five hours, and had a good breakfast; skin cool, and all seems well.

4th June, 10.30 a.m.—Passed a restless night, changing her position constantly; skin hot and dry. Began to be delirious about 7 a.m., since which time there is complete loss of vision, pupils widely dilated, heat of head extreme; pulse 150, temperature 102.2. Cries out in pain every few moments; has vomited; bowels not opened. Ordered the hair to be cut short off, and ice applied to the head, two leeches to the back of each ear, and dry cups to nape of neck and upper part of spine. Gave internally $2\frac{1}{2}$ grs. pot. iod., 5 grs. pot. bromid., 5 minims tr. digitalis, every two hours.

3 p.m.—Less restless, has had short sleeps; took some beef tea and corn starch with relish. Pupils less widely dilated, but still insensible to light. Pulse 114; temp. 103.2. Treatment continued, and in addition gave 5 minims of fluid extract of ergot every five hours.

8 p.m.—Less heat of skin; pupils normal, cannot see; is much more tranquil. Pulse 128; temp. 103.1.

5th June, 10.30 a.m.—Takes food well; is tolerably tranquil; no vision; pulse 112, temp. 100. Applied one dry cup only, otherwise continued the same treatment.

5.30 p.m.—Not nearly so well; very restless; pulse 130; temp. 102.5. Applied several cups to neck and spine.

6th June, 9 a.m.—Had convulsions at 4 a.m. Is now rational. Pupils slightly dilated; sight has returned; has slight bronchial cough; calls out for food, ice and drinks; pulse 110; temp. 100. At 11 a.m. is much as before, but not quite so well. Pulse 134; temp. 101.2.

11 p.m.—Condition as when last noted. Has slept on two occasions about twenty minutes each time.

7th June, 11 a.m.—Sight continues, pupils act freely, skin hot, and does not take food well; pulse 168; temp. 101.

5.30 p.m.—Pulse 140; temp. 100.8. Omitted former mixture, and gave Quinine, phos. acid and hyoseyamus.

8th June, 6 p.m.—Is much the same as yesterday. Treatment continued; cups reapplied. Pulse 108; temp. 101.7.

9th June, 11 a.m.—Passed a good night, sleeping well nearly all the time; is very cross and fretful; looks quite natural; eats well. Pulse 108, temp. 100.6.

6 p.m.—Slept quietly nearly all the day; enjoys her food. Pulse 100, temp. 98.3.

10th June, 11 a.m.—Is decidedly better, but very cross and irritable; eats and sleeps very well. Pulse 104; temp. 98.3. Vision present, but not perfect as before illness, being able to see objects directly in front of her, but not at either side.

11th June, 5 p.m.—Improving rapidly; insisted on being placed at table with the rest of the family to her meals; is very weak and cannot sit up long; eats and sleeps very well indeed. Pulse 68; temp. 99.

13th June.—Continues to improve, and eats and sleeps well, though restless by times. Gave the pyrophosphate of iron. Convalescent. Discontinued further attendance.

25th Oct.—Up to this date the child had continuously improved, and gained in both flesh and strength, although occasionally had complained of pains in her head. Had purulent discharges from ears at different times. The mind of the child, which had been rendered infantile by the disease, was being rapidly restored, and she enjoyed her out-of-door play with her little comrades as well as ever. The range of vision was greater, although the pupils continued to be somewhat dilated. On this day she was taken suddenly ill with pains in her head, great restlessness, marked opisthotonus, dilated pupils, but no extra heat of skin.

On 26th of October, when called to see her, found her delirious, continuously tossing herself about in her bed. marked opisthotonus, dilated pupils, continually crying out, and at times spasms of flexor muscles of forearms. Pulse and skin normal. This condition of matters continued without cessation up to 12 p.m., when she quietly died. No treatment was adopted, as I was unable to see how it could be done with advantage.

POST MORTEM.

Fourteen and a-half hours after death, assisted by Dr. Kennedy, examined the head. Rigor mortis well marked. Face tranquil.

On removing calvaria, find the meninges congested. The lobes of brain slightly adherent, also adhesions to the meninges at the medulla oblongata. On section of the brain find it very anæmic, the puncta vasculosa being hardly seen. Found all the ventricles of the brain enormously distended, and containing together about eight ounces of extremely clear and crystalline-looking fluid. The corpora quadrigemina and pineal gland considerably inflamed. The brain substance itself seemed to be quite normal.

DOUBLE PLACENTA.

By Irvine D. Bogart, M.D., Campbellford, Ont.

On the 21st day of October, 1873, I was called to attend Mrs. E. in her seventh labour. My patient was a very delicate woman, suffering from phthisis. In her two last confinements she had twins, and in each case very severe flooding followed from retained placenta. When I reached her bedside I found her very weak. Notwithstanding this her pains were strong and regular, and in about two hours she was delivered of a fine healthy male child. The birth of the child was followed very quickly by severe flooding, with fainting from loss of blood. Although cold and compression, with ergot and brandy were used, the flow continued. Warned by previous labours I proceeded to deliver the placenta. Upon passing my hand into the womb I found the placenta low down and firmly adherent. I soon detached it, and while in the act of bringing it away I felt something pulling against me. I supposed then that the uterus had contracted upon some portion of the membrane. I passed my hand back and detected a chord. I followed this through a strong hour glass contraction, and in the superior portion of the uterus I found another placenta which was also adherent over three fourths of its surface. Af-

ter much hard work I brought them both away. After getting my patient rallied, which I can assure you was no easy matter, I proceeded to make the following notes:

Child large and well developed; two great toes on right foot and two thumbs on right hand, otherwise perfectly normal. The main placental chord was about twenty-four inches long, running direct to the first placenta which I had removed. This placenta was rather larger than the usual size. This chord, about six inches from the placenta, threw off a branch which was eight inches long and communicated with the second or superior placenta, which placenta was about two thirds the size of the first or inferior one. Each chord had vessels and nerves independent of each other, and there was no union after the branch entered the large or main chord, and this separation continued until they entered the child. I thought after I had washed my hands I would take another look at it, but when I returned I found the women in attendance had put a stop to my investigation by throwing the whole affair into the stove.

I cannot find anything in any work on midwifery in my library relating to such a case. It may not be very rare, but I have had a very large midwifery practice for the last twelve years or more, and I never met with such a case before.

There is little doubt in my own mind that if I had drawn my hand away without detecting the second one my patient would have died. As it was I had great difficulty in saving her life.

Campbellford, Ontario, Jan., 1874.

Progress of Medical Science.

JAUNDICE, PNEUMONIA, AND PLEURISY.

A Clinical Lecture delivered at Bellevue Hospital by Prof. A. L. LOOMIS, M.D. (Phonographically reported for THE N. Y. MEDICAL RECORD.)

GENTLEMEN:—The first patient I bring before you this afternoon is a young man, nineteen years of age, a drug clerk. Two weeks ago he began to suffer from loss of appetite, every article of food became offensive to him, and about a week afterwards he began to get yellow. The yellow color first made its appearance in the conjunctiva, but he had no yellow vision. His habits have been good.

His skin, as you see, is at the present time of a bright golden yellow, his urine red, looks like port-wine, his stools are clay-colored, and he feels weak.

He never has had chills and fever; has had no pain or vomiting.

We have before us then a case of *jaundice*, and in the first place let us notice some of the causes which

would give rise to such a jaundice as this. There is unquestionably an obstruction in the bile-ducts which prevents the free flow of bile into the intestinal canal.

This obstruction may be produced, 1st, by a gall-stone, and pain is one of the prominent, if not the most prominent symptom by which we recognize the presence of this obstruction. The pain in jaundice produced from an obstruction caused by the presence of a gall-stone in the bile-ducts, precedes the jaundice usually twenty-four or thirty-six hours. This pain is somewhat peculiar; it originates in the epigastrium, usually in the immediate region of the bile-ducts, and strikes directly through to the back.

To determine the situation of the bile-ducts draw a line from the right nipple to the umbilicus, and the point where this line crosses the free border of the ribs will indicate it very nearly.

This man has had no pain since his sickness began, and it is altogether probable, therefore, that the jaundice is not dependent upon an obstruction produced by a gall-stone.

Another cause which will produce obstruction of the bile-ducts is an acute catarrhal inflammation. This acute inflammation of the mucus membrane lining the bile-ducts is not primary, but is usually propagated from an inflammation in the duodenum. Again, inflammation of the duodenum does not usually occur as a primary inflammation, but is almost always associated with gastric catarrh as the primary disease.

In acute gastric catarrh, vomiting is almost always present, although in many cases it may not be very severe; but you may expect vomiting, some pain, and a burning sensation at the epigastrium. (The patient was then placed upon the table, and prepared for physical examination.) As pressure is made in the epigastric region, there is manifestly considerable tenderness, yet the patient gives us no history of vomiting. Vomiting, however, we would not regard as absolutely essential to determine the existence of acute gastric catarrh, inasmuch as it may not be present, although it almost always is. In very mild cases there may be simply a loss of appetite to indicate the existence of gastric disturbance.

The first thing which this man noticed was a loss of appetite and nausea, and now he has great tenderness over the region of the bile-ducts and epigastrium, and these alone are sufficient to indicate some gastric inflammation. The obstruction of the bile-ducts, in these cases of acute catarrh, comes from the tumefaction or thickening of the mucous membrane, and more or less from the accompanying secretion.

This inflammation may only involve the hepatic duct, and ductus communis, or it may extend far up into the ducts. As a general rule the catarrhal inflammation extends up quite a distance towards the lobules of the liver. When this inflammatory process has produced sufficient thickening of the mucous membrane to obstruct the ducts, the bile is retained and reabsorbed, giving rise to the jaundiced hue of the skin.

There will usually be some fever present in these cases, generally of a simple ephemeral character, if dependent upon the jaundice alone.

The two principal causes of acute jaundice have been named; obstruction from gall-stones, and an obstruction which occurs in connection with acute catarrh of the bile-ducts.

Jaundice may occur under a variety of circumstances. It may occur from intense congestion of the liver. Sometimes in malarial fevers the congestion is sufficient to cause acute jaundice, but the cases are rare. It may occur from pressure on the bile-ducts produced in a variety of ways, and from a variety of causes. There may be the development of a tumour in the transverse fissure of the liver, which by its mechanical pressure obstructs the bile-ducts, and in this way gives rise to jaundice. In such a case, however, the appearance and extent of the jaundice would be influenced by the growth of the tumor, and it would as a rule be developed slowly. Almost all cases of acute jaundice are due to one of the two causes first named.

In most cases of acute jaundice we have a slight enlargement of the liver, which is due to distention of the ducts with bile. As we make percussion upon this patient it is seen that the liver is enlarged in all directions. In the median line, the line of hepatic dulness extends fully four inches from above downwards.

This is an ordinary occurrence in jaundice, and usually we also get more or less tenderness over the hepatic region, as you see in this case, the patient shrinking when percussion is made. We have in jaundice not only a turning back of the bile, but there is more or less hyperæmia, which may account for the tenderness.

The question is asked, Might not abscess of the liver give rise to acute jaundice? It might, and the first question you would ask, if your suspicion turned in the direction of abscess, would be, Has the patient ever had dysentery? The reason for asking that question is, that dysentery is the most common cause of abscess in the liver, or rather abscess of the liver most frequently occurs with dysentery. It is believed by some that it produces abscess of the liver by embolism, but I am not quite sure about that.

Abscess is very frequently associated with dysentery, but how they are connected with each other I do not know. What the connection is, is not exactly clear. It may be due to embolism, but I am certain that it is not in the great majority of cases, because the embolus cannot be found at the post-mortems, which it should be, if productive of such grave results.

It is simply a clinical fact, and I have never seen a case where the plugging up of the artery has been found.

Abscess would be excluded in this case because the man has had no dysentery, and has no history, which would lead us to suspect the presence of pus in any part of the body. His history is too short for abscess, which, as a rule, has a long history. There is no hectic fever, his pulse is 70, and his

temperature not raised. In abscess the pulse will be accelerated and small in character.

Pyæmia sometimes produces jaundice; and it is very common in connection with all diseases which depend on blood-poisons. In these cases the jaundice is probably produced by some peculiar action of the septic poison on the blood, and the jaundice is not the bright golden yellow seen in this case. In the way of treatment, leeches are suggested, and a much worse thing might be done than that. Counter irritation is one of the means which may be employed to subdue the inflammation, and it may be in the form of dry cups, leeches, or perhaps a blister over the liver, as an attempt to relieve the catarrh.

It is well, however, to recollect one thing, and that is, that catarrhal inflammations are self-limited, unless the stimulus which produced them is kept up. They have a period of dryness, congestion, and secretion; first, an increase of the normal secretion of mucuous membranes, and then muco-purulent. After a certain amount of this secretion has been poured out, unless the inflammatory stimulus is kept up, recovery is rapid and complete.

I do not believe that calomel would be of any benefit in such a case as this, and I would not have you go off with the idea that calomel must be given to act in some peculiar way, because there is hepatic disturbance. If you wish to stimulate the glands of the intestine to action, very well; there is no doubt but that calomel acts as a stimulus to the glands, but everything that is necessary in such a case as this can be accomplished just as well by mild saline cathartics as by calomel. I would not give stimulants, because as a general rule acute catarrhal inflammations are not benefited by stimulants, wherever the inflammation may be. The best diet for the patient is such food as will be digested as far as possible in the stomach.

The second case which I present to you, is one in which there is some question among the gentlemen who have examined it in regard to diagnosis. It is a case of special importance, for it belongs to a class of cases which you will frequently meet in practice, and your credit may be very much affected should you err in diagnosis and prognosis. This young girl, 22 years of age, has been sick four weeks. She was first taken with a chill, which lasted her for most of the time during one night. Immediately following the chill, or chilly feeling, she says her "chest got sore;" that this soreness extended over the whole of the chest;" that there was no more pain upon one side than the other, except when she drew a long breath, and then she felt the most pain in the left side. She had a great deal of fever at the time she was taken, but at no time cough or expectoration. Since her entrance into the hospital, three weeks after she was taken sick, she has had a slight cough, accompanied by a scanty yellow expectoration, and there has been some blood through it. Her chief symptoms, therefore, are difficulty of breathing, following the chill; fever, but accompanied with no cough and expectoration, or pain, except upon a full inspiration. Her pulse is 114, feeble,

rapid, easily compressed, and the temperature $99\frac{1}{2}^{\circ}$. So much for the history of the case.

Physical examination of the chest, for the history directs our attention in that direction, gives us the following:

Palpation.—Vocal fremitus is negative, her voice not being sufficiently strong to give any vibrations to the chest-walls.

Vocal fremitus is a very important sign, because in connection with consolidation of the lung it is increased, and where fluid is present in the pleural cavity it is absent. Hence its importance in making a differential diagnosis between pleurisy with effusion and pneumonia.

Percussion.—There is complete flatness over the posterior portion of the left lung. Over the posterior portion of the right lung the resonance is slightly increased.

Anterior, there is dulness in the infra-clavicular space of the left side, but not flatness. Upon the right side the percussion-note is about normal.

Auscultation.—Bronchial respiration is heard all over the left lung posteriorly, being heard distinctly *low down*. There are no râles present except an occasional unimportant mucous râle connected with the bronchial tubes.

Over the right lung, posteriorly, respiration is exaggerated and vesicular in character. *Anteriorly*, upon the left side no râles, and upon the right side purely vesicular respiration, but somewhat exaggerated.

These are the physical signs, and together with the history of the case present some interesting points in connection with pneumonia and pleurisy.

First, with regard to pleurisy. The fever and the pain in the side which the patient had at the commencement of the attack might indicate the presence of pleurisy, yet the pain was not sufficiently severe to warrant the conclusion that the pleurisy was the leading feature of the disease. The existence of pleurisy would not be determined, therefore, by the amount of pain which the patient suffered.

The complete flatness upon concussion over the affected side, and the absence of all respiratory sounds except along the course where the bronchial breathing is present, tells us of the existence of pleurisy. The bronchial breathing is sometimes heard in subacute pleurisy, but it is *high up* and never at the lower portion of the lung, as in this case. This bronchial breathing always means lung consolidation, and in this case being heard over the lower portion of the lung affected, leads us towards pneumonia as the cause of the consolidation. The patient, however, has had no cough and expectoration until three weeks after the accession of the disease. We usually have the characteristic expectoration of pneumonia present within two or three days after the occurrence of the chill: but in this case we have had no expectoration at all in the acute stage. The bronchial respiration, however, over the entire lung, lower as well as upper portion, may lead us safely to conclude that consolidation is present as the result of pneumonia.

There is probably no way of determining this

question positively as regards the presence or absence of fluid in the cavity except by the use of the exploring trocar, although we might be led to exclude fluid from the fact of hearing bronchial respiration down to the bottom of the pleural cavity. In this case the patient has been tapped in the way indicated, and no fluid was found.

Our diagnosis, therefore, must be that this is a case of pulmonary consolidation, with a large amount plastic exudation. The material which has been poured out in this case as the result of the pleurisy is not fluid, but is of a gelatinous character, and it has been poured out in such abundance that it has caused some compression of the lung, which has undergone more or less consolidation.

The case now becomes one of interest with regard to prognosis. In the first place, a pulmonary consolidation which has lasted for four weeks means something.

Bronchial respiration heard over a lung, when there is no fluid in the pleural cavity, unquestionably indicates pulmonary consolidation. The cause of that consolidation is not so clear. The rational history of croupous pneumonia, in many respects, is wanting. Still, I believe that consolidation of a pneumonic character takes place in lungs compressed by extensive plastic exudation without the patient's giving a clear pneumonic history, and that pleuropneumonia, under these circumstances, resolves slowly. Always when pleurisy is marked during the course of a pneumonia, the resolution is very slow and yet as a rule these cases recover entirely without the development of phthisis.

If it were not for the morbid pleuritic element in this case, all the physical signs present would lead one to the diagnosis of pulmonary consolidation alone, and of four weeks' standing; the case then would be much worse than it now is, in a prognostic point of view; for then we might expect purulent infiltration or cheesy degeneration of the consolidated portion. This lung will undoubtedly be crippled for a long time, but resolution will finally be completely accomplished.

The patient must be sustained by good diet, tonic remedies, and the best hygienic influences. If any thing depressing occurs to the patient, the pleuritic exudation may become cheesy, and after a time be the nidus of a tubercular development, so that the prognosis, although good, must be qualified.

This, gentlemen, is one of a class of cases you will occasionally meet with, and it is well worthy of your careful study.

CLINICAL LECTURE ON CHRONIC ALBUMINURIA.

DELIVERED AT BELLEVUE HOSPITAL, N.Y.

By Prof. Austin Flint, M.D.

GENTLEMEN: The topics which I shall present to you to-day embrace many features which are of much interest and importance, but which I shall be able to consider only in part. We have already considered acute desquamative nephritis, and now I

wish to introduce for your consideration and study the different forms and manifestations of chronic disease of the kidneys. The existence of these affections is recognized by the changes which are manifested in the urine, and also by certain consequences resulting from renal disease. I wish to call your attention to certain points which will somewhat simplify and systematize your study, and I shall ask you to carefully read what has been written by some standard author or authors upon the different forms of chronic degenerative diseases of the kidneys, the effects which result from these different forms, and the circumstances which are involved in the differentiation, each from the others.

The most generally adopted classification of chronic diseases of the kidneys, or chronic Bright's disease, embraces four forms, namely: The large white kidney; the cirrhotic, or fibroid kidney; the fatty kidney, which some authors do not regard as a distinct form; and the amyloid, waxy, or lardaceous kidney. What effects do these different affections severally and collectively produce in the body?

These may be conveniently arranged in two classes: First, a diminished density of the blood due to a constant elimination of albumen in the urine. This undoubtedly is an important element in the production of the dropsy which is so constantly present in these affections; but I would not be understood as saying that the loss of albumen, and consequent reduction in density of the blood, is the sole cause of the dropsical manifestations.

The second class embraces effects which are due to the retention in the blood of excrementitious materials which should be eliminated from the system by the kidneys.

With the impoverished condition of the blood, which is in proportion to the loss of albumen, we have the dropsy, anæmia, and all those ulterior effects which arise from an anæmic condition; and with the second class, we have all the effects which arise from the morbid conditions of the blood caused by the retention of the excrementitious constituents of the urine.

The symptoms to which the latter of the two classes of effects give rise may be divided into the minor and grave symptoms. Among the minor symptoms are headache, nausea, and vomiting; looseness of the bowels, muscular cramps, etc. These are important symptoms, for the reason that they furnish evidence of a renal affection leading us to investigations which relate to the kidneys. More serious symptoms are those which denote inflammations, chiefly of the serous membranes, namely, pericarditis, pleuritis, and meningitis. Still graver symptoms are convulsions and coma. With this brief outline, I shall bring before you cases illustrative of chronic renal disease.

The first case is a girl æt. 18, a domestic. The countenance of this patient is quite typical. It is pallid, showing anæmia; and puffy, showing dropsy. There is a certain amount of anasarca present, not marked, but sufficient to show that the dropsy is diffused through the areolar tissue. A very reliable

method of determining whether diffused dropsy is present or not, even in a very slight degree, is to make pressure over the sternum. If there be œdema, it can be recognized at that point. An important question to be decided now is, does the dropsy in the present case arise from an affection of the kidneys, or from an affection of the heart? It may be laid down as a general rule that, if there be much general dropsy, unaccompanied by difficulty in breathing, the dropsy can hardly arise from cardiac lesion. There is no evidence of heart disease in this case. Examination of the urine gives a. s. g. 1018 acid; it contains considerable albumen, epithelial and granular casts and urates.

Let us now turn to the history of the case. Her family history is good. Patient is temperate; no evidence of specific disease. Two years ago—and this is a point of much interest—the patient had scarlet fever. It will be recollected that, while studying the acute form of Bright's disease, your attention was called to the fact that a great majority of the cases of acute albuminuria, or tubal nephritis, are cases in which the affection is a sequel of scarlet fever. It was also remarked that the acute affection rarely terminates in a chronic condition. But it seems probable that the case before us is a chronic affection, and that it dates its commencement from the occurrence of the scarlet fever; in other words, that we have here a chronic affection of the kidney following an acute tubal nephritis. Since she had the scarlet fever her feet, face, and body have occasionally become puffy, and the amount of urine passed has been sometimes quite scanty. Her face has never regained its natural colour, and her strength has been very much diminished. She dates her present sickness at four days before her admission into the hospital. While in a profuse perspiration she sat down in a current of cold air, and she was seized with slight chill, with severe pain in the left side and afterwards in the right side. Upon admission the pulse was frequent, the temperature raised, and the respirations rapid. To-day a physical examination of the chest reveals fluid in both pleural cavities. Now a question of interest is, is this hydrothorax dependent upon the renal disease, or is it a case of double pleurisy? I do not hesitate to say that it is a case of double pleurisy. It is a case of double pleurisy which proceeds from renal disease, without much general dropsy. With but little general dropsy, and with no disease of the heart, it is out of all experience to have as much dropsical effusion within the chest as in this case. This case may therefore be regarded as an illustration of the occurrence of chronic affection of the kidney following acute tubal nephritis, and also an illustration of double pleurisy produced by renal disease. Her pleurisy has been treated by the application of dry cups to the chest; she has had, in addition, ten grains of quinine once a day, and pills of iron, aloes, and strychnia.

The second case gives us the following history:

Mrs. —, æt. 33, English, and admitted to the hospital September 22d. Family history good.

Patient was healthy until one year ago, when she began to suffer from attacks of dyspnoea without cough, which were probably asthmatic in character. Vomiting and œdema of lower extremities first occurred about six months ago. During the past two weeks she has suffered from some pain in the back, and her urine has been scanty and high-coloured. The vision has always been good. Upon admission the patient presented an anæmic appearance, the breath was short, and the appetite poor. Examination of the urine gave s. g. 1010, albumen and casts. Physical examination of chest negative.

Sept. 26th.—Under the influence of diuretics and tincture of iron the patient's urine became more abundant, but giving same results by chemical and microscopical examinations.

Oct. 28th.—The patient does not pass much urine; complains of pain in her back and shortness of breath.

Upon physical examination of the chest, the area of cardiac dullness is found to be very much increased, and with this there is a murmur with the first sound of the heart at the base. This patient now has pericarditis, with considerable effusion of serous fluid into the pericardial sac. There is considerable œdema of the lower extremities, and also considerable fluid in the abdominal cavity. Her face does not show any dropsy, and there is but slight indication of its diffusion by making pressure over the sternum. The question may arise here, is this a case of pericarditis, the inflammation giving rise to the effusion into the pericardial sac; or is it a case of hydrops-pericardium due to the chronic renal affection? There is a slight, but a sufficiently distinct friction murmur occasionally heard, and this sign, be it ever so slight, indicates pericarditis, with a single exception. Sometimes, when there is a pleurisy of the left side, the action of the heart causes the exterior of the pericardial sac to rub against the pleural surface, causing a friction murmur with the cardiac rhythm, and this is called a cardiac pleural friction murmur. If the murmur were of this kind, it should be heard at the left lateral portion of the pericardium. But the friction murmur is more to the right, nearer to the base; it is superficial in character, being a slight grazing sound.

Taking into account the existence of pericardial effusion, there can be no doubt that the murmur denotes pericarditis. Pleurisy can be excluded because an abrupt line of dullness denotes the boundaries of the distended pericardial sac, good resonance on percussion being found everywhere without these boundaries. A simple enlargement of the heart would not produce the dullness which is here found to extend above the base of the organ. The increased space of dullness in cardiac hypertrophy is downwards and to the left. This patient is not suffering much pain, nor is pain a constant symptom of pericarditis. Pain in this disease is sometimes extreme, and sometimes almost entirely wanting. We have, then, in this case another example of serous inflammation developed in the course of chronic renal

disease, belonging among the grave secondary affections.

As regards the measures of treatment addressed to the pericarditis, in this case some soothing applications should be made to the præcordia; a light poultice, or the water dressing covered with oiled muslin, and an abundance of flannel. If the kidneys are found to respond to diuretics, these are indicated for a twofold purpose, as follows; to eliminate urea, and to promote the absorption of the liquid in the pericardial sac. Rigid quietude is to be enforced. There is danger of sudden death by syncope on exertion in cases of pericardial effusion. The condition of the patient will not admit of the employment of the active hydragogues with a view to the absorption of the effused liquid; but if the kidneys do not respond to diuretics, saline cathartics, or perhaps the pulvis purgans, may be advisable. The patient should be well nourished. Digitalis will be likely to be useful by increasing the power of the heart's action.

The third case illustrates a condition associated with, but probably not dependent upon, the renal disease.

The patient's name is Miss C—, æt. 22. She was admitted to the hospital on the 2nd day of September. Family history good. Since last May she has had more or less œdema of the lower extremities. The dropsy extended up the limbs, appeared on the face, and then about the body. She has had occasional nausea and diarrhœa. Exercise gives rise to palpitation of the heart and want of breath. This patient has a pallid countenance, but this is not as marked as when first admitted. Examination of the urine at the time of admission gave a low specific gravity, with albumen and granular and epithelial casts; subsequently, hyaline casts were found.

September 5th, hydro-peritoneum made its appearance, which has continued and somewhat increased up to this date, Oct. 30th; and at the present time there is, as you see, considerable œdema of the lower extremities. No œdema of the face. The question arises in this case, is this hydro-peritoneum due entirely to the renal disease, or in part to some other cause? Although we have evidences of renal disease, I am quite sure that there is some other affection to account for the hydro-peritoneum. The hydro-peritoneum in renal disease sustains a relation to the dropsy in other parts of the body. But the general dropsy in this case is not an important feature, and this leads us to conclude that the hydro-peritoneum is due to some other disease than the renal disease. It is probably due to disease of the liver—but the expiration of my hour prevents further consideration of the case.—*New York Medical Record*.

DISEASES OF THE CHEST IN CHILDREN: THEIR TREATMENT BY BLISTERS.

By DANIEL MACLEAN, M.D., L.F.P.S.G., Glasgow.

The object of this paper is to notice a method of treatment in the diseases of children which is, so far as I am aware, novel, and which I have adopted

in suitable cases with great benefit. It is a treatment for which parents have very often little partiality, but by which many lives will be saved; and if my views be correct, it is based upon a pathological groundwork, and explains numerous circumstances in connection with these diseases otherwise obscure.

Diseases of the chest hold a remarkably high place in the yearly bill of mortality; causing in Scotland the deaths of as many children of five years of age and under, as the deaths at all the other ages put together. Any means, therefore, that will modify this state of things, or even give a greater control over these diseases, is well worthy of consideration, and is a justification for bringing before you what might otherwise be deemed a trivial subject.

The treatment which I would advocate over and above the special treatment to the chest proper, is the application of counter irritation in the form of small blisters over the roots of the nerves going to the chest and those auxiliary to the act of respiration. The most appropriate spot for their application is immediately behind the ear, where there is naturally no growth of hair. The form of blister which I invariably use is the tela vesicatoria of the Messrs. Smith of Edinburgh; it has no specific virtue over the other forms of cantharidine counter-irritation, but is very convenient, cleanly, and almost certain in its action, especially on the tender skin of children. These blisters have this special recommendation, in such cases, that they are comparatively painless, and can be allowed to remain applied to the surface an indefinite length of time, as they never produce destruction of the true cuticular tissue—only irritation, which raises the epidermis with a layer of serum below; and this serous fluid acts as a protection to the more active surface beneath. Three hours, when applied to a child, is in general a sufficient length of time; then, by substituting a layer of fine cotton-wool, a bag of fluid will be speedily produced, whose action will protect the tissues from undue stimulation. This amount of counter irritation is usually quite sufficient for producing the effect required; but should circumstances necessitate it, reapplication can be continued, so long as the blisters are thought to be of benefit. In this way we have complete control over the counter irritation, and can modify it according to circumstances.

My reason for using this method of treatment is, because there is so much nerve-force acting in excess in diseases of the chest in children, as to influence to a very great extent their continuance and their result. It is with the object of getting rid of this *vis nervosa* in excess, that I recommend the adoption of this blistering treatment in the diseases of children. The results of my use of this style of treatment have been such as to justify me in advocating it as one of our stock methods of cure in diseases such as those which I mention.

It is not of value in every case of chest-disease, nor in every stage of each case of chest-affection. Speaking generally, it is only of value in disease attended with a permanent or prolonged irritation of the mucous and elastic minute tissue of the smaller

bronchial tubes and tissue of the air-cells, such as is found in the acute stage of most diseases of the chest. I have used this treatment in many cases in different diseases of the chest in this stage of irritation—when the tubes are in the dry, congestive, or inflamed condition of the disease—and I find that the patient quickly improves; the respiratory murmur becomes soft, and the moist mucous *râles* are developed in a comparatively short time, before the child has become weakened either in body or in lungs. The convalescence is much speedier, with fewer fatal mishaps than took place previously from the full virulence of the complaint being only attacked at one point, viz. in the lungs themselves. All these diseases influence the whole body as well as the lungs, besides being themselves influenced and kept up by the general condition of the whole system, more especially through the agency of the nervous system.

I do not propose to give in detail the cases in which I have applied blisters to the head in chest-affections, but only to mention generally those in which the greatest benefit is to be gained from this procedure. Like others, I have been often baffled by this class of diseases, and believed that there was some other factor or factors at work besides the local alteration of texture; and, from the frequency with which nervous symptoms appeared, was led to believe that the brain or nervous system was the disturbing influence at work. I had the care of a child about a year old, who baffled me for some time. There were no apparent head-symptoms; the child was out of sorts, restless, uneasy and fretful; the skin was hot, the respiration hurried; there was a dry irritating cough, and the child refused to take food. All over the chest in both lungs the respiratory murmur was harsh, rough, and tubular; no moist *râles*, no crepitation, no rhonci. This condition continued for some time, and the child was losing flesh, notwithstanding the use of almost all the remedies usual in chest-affections, till I persuaded the father (with the greatest difficulty) to allow me to apply two small blisters—one behind each ear, for three hours. The next day the breathing was easier, the restlessness greatly subdued, and the respiratory murmur became moist and soon natural, all of which was the precursor of a speedy recovery. Another case of the same character came under my care; the same difficulty was experienced in removing the disease; but the father, being a man of intelligence, on the reason being explained to him, at once permitted the application of the blisters; after which the alteration in the condition of the child became in a very short time so marked, that there was no difficulty in tracing the result to its proper cause.

I also use the blisters in the bronchitis of children when I am called in the early stage of the disease, before the supervention of the moist mucous *râles*, notably in the first or dry feverish stage of the complaint. Bronchitis is a complaint occurring so frequently, that people become accustomed to it, and object to what they consider the cruelty of applying blisters to young children, and refuse to permit their application at the only time when they can be of use;

but would often wish them put on in the advanced stages, when, instead of doing good, they do harm. Thus I have not had the privilege of applying them in all cases of bronchitis; but where I have had the opportunity, in the proper cases and at the proper time, I have invariably shortened the disease and had speedy recoveries.

In measles, also, blisters applied as I recommend are desirable. Although this is not strictly a disease of the chest, yet in every case the lungs are involved as much as if the origin of the ailment had its seat there. When the disease has a fatal termination, it comes generally through some lung-complication, or through some alteration of the cerebral centres, such as convulsions. The latter complication is not an accompaniment invariably attending measles like the chest-affection; but nervous derangements occur so often that it shows an intimate connection between the two, and unmistakably points out for adoption the principle and practice I wish to establish. In measles, I generally apply the blistering treatment both as a means of cure to the chest-complication, and as a preventive to the development of cerebral symptoms. In all cases I look out for nervous symptoms, as I believe they always indicate a very severe phase of the malady. The sudden disappearance of the rash in measles is often followed by an outbreak of some affection of the brain. It is, therefore, at all times wiser to be prepared for such an emergency by the adoption of treatment which will have a tendency not only to prevent such an occurrence, but will at the same time relax the excited and congested bronchioles and air-cells. The same treatment by blisters holds good as well in cases of infantile pneumonia, during the first or congestive stage, when there is a determination of blood to the pulmonary capillaries and increased activity in all parts of the lungs. Of course, this treatment is founded upon the same principle as in the other diseases of the lungs, and is applicable to all diseases in which the same conditions hold good.

All the different diseases which I have mentioned, bronchitis, pneumonia, measles, and congestion—it will be observed, may be divided into two classes; those that begin in the lungs, and those that have their origin in the nervous system. But, although the origin is different, the result upon the lung in the first stage is the same, and justifies the adoption of the same method of treatment.

By this method of applying blisters behind the ear, I believe that I shorten the duration of the disease, reducing the length of the first stage, and hastening the recovery. The irritated condition of the minute tissue of the bronchial tubes and air-cells, with the determination of blood towards the parts, being removed, the moist stage of the disease is quickly induced; thus, generally, preventing the exhaustion of the body and lungs, which takes place if the disease be allowed to run its course, or if we must wait till it submits to our usual pulmonary remedies.

This method of treatment is not only of practical value, but also involves a pathological principle of action, which is of the first importance, and which

is in force not only in the case of children, but of adults as well, although not so apparent, and not at present under discussion, viz., the important part which the nervous system plays in disease, and especially in disease of the lungs. In children, this part of the organism cannot be ignored, and is on all hands admitted to be proportionally in extra activity—necessary, during early life, to fulfil the purposes of growth; and it thus becomes a factor whose influence cannot be safely overlooked during disease. In the condition of parts to which the blistering treatment is applicable, the reflex action of the nerves supplying the lungs plays no secondary part in exciting, continuing, and modifying the abnormal action going on.

We must remember that the air-sacs in children, as well as the ultimate bronchial tubes, the terminal dilatations, and the alveoli, being smaller than in adults, when from any cause contraction takes place, these become still smaller. Their capacity being diminished, and the blood-vessels having become less in diameter through the forcible application of the elastic tissue, less air enters the air-vesicles, less blood passes into the capillaries, and there is less freedom in the transfusion of the gases—necessary to health—from the increased thickness of their walls: we have thus increased frequency of respiration, and diminished aëration of the blood, so that there is a condition inherent in the parts themselves which enables the smallest cause to act prejudicially.

Supposing a case of bronchitis to be taken as a typical example of the action going on in the body: there is first the exciting cause or "cold" invading the lungs through the tubes, acting upon the mucous membrane as a local irritant, interfering with its normal nutrition, and deranging its circulation. This effect of irritation is not confined to the large and small bronchial tubes, but also affects the air-cells with the pulmonary circulation, though to a less extent. This irritation stimulates the minute tissue to increased action, and we have contraction of the elastic tissue, with an increased flow of blood in the capillaries, causing active congestion, which implies contraction of the capillary vessels. This contraction of the elastic tissue should cease so soon as the exciting cause—the "cold"—was removed. This does not take place, because the contraction and congestion of the parts are continued long after the cause is removed; because, besides acting as an irritant to these, it also has raised an action or irritation on the periphery of the nerves, thus irritating the filaments of the pneumogastric nerve through the afferent fibres; the impression is carried to its ganglionic centres, and thence, by the reflex process, is sent through the efferent fibres back to the already irritated and excited minute tissue, contracting still further the capillaries and elastic tissue. The original irritation is thus followed by that produced by the action of the nerves, and that process is kept up till the nervous action ceases through exhaustion. By this time the tissues involved, and very often the body itself also, are exhausted; too late, probably, for the little patient.

Dr. Roberts, in his article on Bronchitis, in

Reynold's *System of Medicine*, says that the "cold," besides acting, as I have mentioned, on the mucous membrane, operates secondly "by acting upon the system at large, in some way or other not understood; the bronchitis being only a part of the general disturbance." This little understood part of the process going on in bronchitis is explained by taking into account the stimulation of the nervous system in connection with the local affection. It is not an explanation of all the symptoms in connection with the disease, but it accounts for most of them. You cannot have disordered function going on in any part of the body without its influence being felt, more or less, throughout the whole; and if deranged tissue-function affects the body, how much more will the deranged nervous function affect the general system, considering how easily and readily impressions are carried along their filaments.

Besides the irritation going on at the periphery of the nerves, influencing the tissue to which the filaments are distributed, this influence is not without its effect upon the ganglionic centres themselves; and cannot fail, by being continued for a length of time, to produce a pathological action there also. No organ in the body can be kept, for a length of time, in a state of irritation, without affecting its minute tissue, and producing, by its increased action, an increased growth of a low type among its cells, making them incapable of performing their proper work. This seems to be what takes place in the cerebral centres, and they cannot be expected to escape the operation of the usual law; so that, by long continued action in the filaments of the nerves, the nerve-cells themselves are ultimately affected, and we have at length, what is met with very often as sequelæ of disease in the chest—nervous symptoms, convulsions, and, probably, effusion into the ventricles. Any one at all conversant with the diseases of children has to lament, too frequently, this result following disease in the chest; and to my mind the explanation is quite clear.

Thus we have, in the disease to which I refer, an action and reaction going on, the chest upon the brain and the brain upon the chest. To this fact is to be attributed the increased mortality among children from diseases of the chest; they are less stable in the materials of which they are constituted; they are more susceptible to external impressions; their nervous system is, so to speak, too highly strung; and we thus account for the little understood conditions mentioned by Dr. Roberts.

The converse of this state of matters also holds good, as is to be expected, if the principle advocated be true; viz., that diseases of the brain and nerve-centres produce disease or disordered function at parts distant from themselves—notably, in the lungs. Should an abnormal action be going on among the cells of the brain, it is impossible that an influence should not be sent along the nerves which arise from them, unless the abnormal action has advanced so far as to destroy the central cells. From the close connection between the ganglionic cells and the nerve-filaments, any irritation or stimulation among the cells will pass along the nerves to their periphery;

and unless it be denied that the nerve-filaments have any function to perform in the parts to which they are distributed, this central irritation will cause irritation and contraction of the elastic fibres of the air-cells and bronchioles; and, in this way, you have an abnormal action taking place in the lungs, from a disordered or diseased condition of some of the nerve-cells of the brain or nervous system.

We have thus in the chest, disease arising in the lungs from some cause external to themselves; and we have disease in the chest from some cause seated in the brain. The class of cases first mentioned, where we have increased respiration, tubular breathing, etc., in which I first applied the treatment by blisters behind the ear, is an example of abnormal action in the lungs, arising from disorder in the encephalon. The affections of the lungs in measles have also their origin extraneous to the lungs themselves. Some authors also speak of diseases in the chest from the reflex action of the dental nerves in teething; and, as examples of affections of the lungs arising in the chest itself, no better could be obtained than those of bronchitis and pneumonia. In whooping-cough, we have another example of an irritation of the nerves causing disease of the lungs; here we have the action of the nerves of a different character, acting upon the minute tissue of the lungs only at intervals, and by the powerful spasmodic contraction and relaxation its tendency is to exhaust the tissue, as I have pointed out in my paper on the Open Air Treatment of Whooping-Cough, in the *Glasgow Medical Journal* for last year. In this disease there is the interval of relaxation, which gives the tissue time to recover itself so far from the effects of the nervous action; but, in the cases under consideration, the baneful influence at work upon the tissue is prolonged without intermission, and what is required is to remove for good what takes place in whooping-cough only now and again.

If the opinion thus given, as to the important part the pneumogastric nerves and ganglionic centres play in these diseases, be correct, in what way can we turn this knowledge to account, and reduce the disease itself to a minimum? There may be other modes of effecting this object, but, as I have indicated, the placing a blister at or near the course of the nerve, between the irritated terminations of the nerve-filaments and the irritated ganglionic nerve-cells, has given me convincing evidence, in the results, that the action going on between these two parts has been stopped; at all events, symptoms, indicating that such an action has ceased after this application, have established the fact as strongly in my mind as if it could be demonstrated.

The explanation of the use of counter irritation in this manner is, that it comes between the two spots where nervous action commences, and this new centre of irritation acts as a tap to the nervous force here, and diverts it from its usual course. The *vis nervosa* coming from the lungs, and the *vis nervosa* coming from the ganglionic centres are both stopped at this point, and their energy, being expended in this new inflamed tissue, does not proceed further to keep up the pathological action either in the lungs or

in the brain. In fact, from whatever part the irritation comes, by this means it ceases to be reflex action. Commencing in the minute tissue of the air-passages, it passes along the afferent filaments of the nerves till it reaches this new centre of irritation, and there expends itself, not passing to the ganglionic cells of the brain; and, in the opposite direction, the influence coming from the brain ceases at this point also; so that the reflex action is removed, and the irritated terminal points have time to recover their wonted condition. I consider that this action of the blister has much the same power, though less permanently, as could be attained by the division of the nerves at the same part of this course. Section of these produces diminished respiration, relaxation of the elastic fibres, with retarded flow of blood through the capillaries, and effusion of serum from these vessels. Blistering over the course of the nerves produces a state of things much the same, only of a temporary character, and not so extreme. During the action of the blister, which can be continued or removed, the hurried respiration is moderated, the dry vesicular murmur is removed, and we have the exudation of the natural secretion from the mucous membrane, so that we have remaining only what Dr. Laycock calls the *vis nervosa* of the tissues themselves. The great factor, whose action so powerfully affected the original malady, having been thus removed, the parts soon recover their original tone, not having been subjected to the long continued exhaustion which follows the unimpeded action of the reflex power playing through the pneumogastric nerves. Moreover, the system generally does not suffer to the same extent, and, consequently, recovery is much more rapid and satisfactory.

When disease in the chest arises from some abnormal action going on in the encephalon, the blisters remove the chest-disease, and we are at liberty to direct our efforts to the cerebral disturbance, thus limiting our remedies to a smaller morbid locality; and, the body submitting to only one focus of injury, the disease in the chest, being removed, ceases to act as a stimulus to that of the encephalon.

Some objections may be raised to this explanation, as involving a new theory as to the action of blisters, as well as the new theory mentioned previously, in reference to the pathological action of the nervous system in diseases of the chest. I am one of those who believe that blisters act as stimulants, but not that their stimulating action does good only through the nervous system, and through that alone, as is believed by those who call themselves "Young Medicine." Dr. Anstie is, perhaps, the clearest exponent of their views; and in the *Practitioner* for March 1870, he says of blisters, that "they are the refuge of the destitute." He will probably object to the explanation given; but even he, in his anxiety to confound those who differ from him, and to establish his own views, contradicts himself in the seven propositions which he gives in explaining the action of counter irritants. In some of his views I am at one with him; but, in others, he is as unsatisfactory as he accuses his opponents of being. It seems to me that blisters act in different ways

under different conditions. They act by diverting nervous force; they act by exhausting tissue-tractility; they act by the stimulation of glands and tissues; and they act by stimulating reflex action; but that blisters are only "the refuge of the destitute" I deny. Guided by observation and experience they become handmaids to the wise, and afford a harbour of safety for the destitute in health.

SURGICAL HINTS. BY A LATE HOUSE-SURGEON.

Leeches are now so comparatively seldom used that many people do not know how to make them bite. The part to which they are to be applied should first be thoroughly cleansed with hot water, but no soap. A little milk or cream should then be smeared over the place, and the leeches, having been allowed to crawl over a rough towel for a few seconds, should be put into a pill box, cupping or wine-glass, which is then to be inverted over the place to be leeches. If in a few minutes the animals do not bite, they should be gently rubbed in a towel and again tried. If still obstinate they should be immersed for a second or two in some effervescing fluid—soda water or lemonade are generally at hand. If this does not make them bite, it is said dipping in beer or porter will; but I have never been reduced to giving them stimulants. If a particular spot has to be leeches a small test tube should be substituted for the glass, and, of course, one leech at a time applied with it.

Ligature. Antiseptic. How to prepare.—The antiseptic ligature of arteries is now nearly universal. The following is the plan of preparing the catgut recommended by Mr. Lister: "Catgut, manufactured from the small intestine of the sheep, may be had at a low price, from the thickness of a horse-hair upwards." This is prepared for surgical purposes by "suspending it in a mixture of five parts of some fixed oil (*e.g.*, olive or linseed), with one part of carbolic acid liquefied by adding five per cent. of water to the crystals. It is necessary that the gut be kept suspended so as not to touch the bottom of the vessel, for any parts dipping into the layer of precipitated water would fail to undergo the change desired. The vessel containing the emulsion should be left undisturbed, for if the water is shaken up with the oil the process is retarded. The gut should be prepared in as cool a place as possible. The longer it is kept in the emulsion the better the gut becomes. It is not ready for use until it has undergone considerable molecular changes, which seem to require several weeks immersion. It should be "quite free from opacity, and very strong, though supple. If drawn through the fingers it is no longer slippery, but has a crisp feel like a thread of india-rubber, and a knot tied upon it holds more securely than one on waxed

silk. Water, whether cold, or at a temperature of 100° F. has now little effect on the thread."

Pad for Heel.—In all cases of fracture or disease of the lower limb treated in the straight position, it is obvious that the part of the heel where the Tendo Achilles is inserted has to bear a great share of the weight of the limb. This is not a part of the body endued with much vitality, and sores from pressure are very apt to occur if not guarded against. To some extent this may be done by the use of a bird's nest, as described below; but it will be found a more sensible and efficient plan to "level up," as it were, by using a pad made to fit into the hollow above the heel, and thus distribute the pressure over a large surface. This pad should be firm, and is best made by rolling cotton wool or oakum in a small towel or piece of cloth.

Padding for Splints.—Pads for splints are either made up and kept ready, or extemporised. The prepared ones generally consist of cloth bags filled with hair, cotton wool, sawdust, or bran—preferably the last. Under this head may be classed sand bags. Extemporised pads are made of rolled towels or sheets, cotton wool, tow, oakum, or combinations of these. For simple fractures cotton wool is most often used, and is best prepared by tearing a sheet, or layer of it about three inches longer, and double the breadth of the splint; folding in the two edges until they meet in the middle, and turning the projecting ends over the splint. In some instances it is advisable to wrap the cotton-wool or other material in a piece of cloth or carbolic gauze, and, with the made-up pads, bandaging them first to the splint will often be found a useful manœuvre. If discharge is expected, the padding should be protected by gutta percha tissue fixed with chloroform.

Ring, or Bird's Nest Pad.—In the adaptation of all rigid apparatus the bony prominences of the body are liable to undue pressure. To obviate this it is an error to stuff in cotton wool or any soft substance between the splint and the prominence. A moment's thought will show that this increases the pressure and only gives a softer surface. It will be found that a circular pad of a ring form answers the purpose best. This is called the ring pad, or bird's nest, and is easily and quickly made by tearing a strip of cotton wadding about a foot long, and as thick as three fingers; twisting this lightly into a sort of rope, winding round the fingers and turning in the end. If a more permanent pad of this description is required, the india-rubber rings filled with air, made for uterine pessaries, will be found convenient.

Patient, How to Lift.—In lifting a patient from bed, or off and on to the operating table, it is expedient to have four people. The bed or table from which he is to be lifted is not to be placed alongside the bed or table on which he is to be placed, but at the head or foot of, and in a line with it. If possible, the sheet or blanket upon which the patient is lying should be used to lift with. Each corner being grasped by a bearer, they should all lift at one, and walking two on each side of the bed they can easily deposit their burden where

* Observations on Ligature of Arteries on the Antiseptic System, by Joseph Lister, F.R.S., &c. Edinburgh: Edmonston and Douglas; London: John Churchill and Sons; 1869. Corrected, February, 1870.

desired without jolt or jar. If this cannot be done, and the patient has to be lifted without the intervention of a sheet, the important point is to see that the pelvis and any injured limb are properly supported. If it is necessary for four bearers to carry a patient in a basket or litter for any distance, they should carry the feet first, except upstairs, and those on the one side should keep step with each other, but not with those on the opposite side. By this means a minimum of shaking is produced.

Patient, How to Tie Down.—Despite the well-founded objection now entertained to mechanical restraint, it is still sometimes necessary to tie down a very unruly patient, and the following plan I have found to be the best. Having fixed the two wrists together with a stout bandage, the patient is placed in a recumbent position, and a light, folded sheet passed over his elbows and below his back, and fixed on each side of the bed. By this means he is completely controlled, yet no pressure is made upon his chest or abdomen.—*Students Journal.*

ON THE PREVENTION OF UTERINE INFLAMMATION.

By Edward J. Tilt, M.D.

The author gave it as an admitted fact, that the most frequent causes of uterine inflammation was to be found in parturition and in abortion; and his own experience led him to believe that a tedious labour and a bad miscarriage could hardly occur without entailing more or less of uterine inflammation; frequently overlooked in its onset by the medical attendant, metritis in one form or another, being the almost inevitable sequel of such cases, although many years might elapse before the disease was recognised. The author proceeded to answer the following questions: 1. What are the symptoms of a bad getting up? 2. What are the organic lesions of a bad getting up that lead to uterine inflammation? 3. How to prevent a natural function from becoming a frequent cause of metritis? 1. After tracing the symptoms of a bad getting up, the author deprecated the little attention paid to the persistence of a red or muco-purulent vaginal discharge for a month or more after parturition. He wished such cases to be carefully inquired into, instead of being treated in a haphazard fashion by tonics and change of air. 2. Although a natural function, parturition had too often untoward results, such as defective uterine involution, placental ulceration of the womb, and contusion and laceration of the cervix. Laceration of the cervix was represented as very common, particularly after tedious and instrumental labours. The healing by first intention of these lacerations was given as the rule when they were not extensive, and when women were healthy; but if, on the contrary, these lacerations were extensive, they did not heal in sickly women, and had originated some of the worst cases of uterine inflammation that the author had seen. Under similar unfavourable circumstances of health, the bruising of the cervix by a tedious labour was repre-

sented as beyond the power of the womb to repair, unless by the repair of ulceration thus produced. Ulceration of that part of the womb to which the placenta had been attached was considered a rare disease, sometimes following the forcible tearing away of the placenta from the womb, and originating one form of internal metritis characterized by frequent flooding. The most important and most frequent cause of uterine inflammation, and of other diseases of the womb, was said to be defective uterine involution. To an exaggerated belief in the safety of a natural function was ascribed the fact that medical men too often neglect to ascertain accurately what were the organic lesions that impeded a patient's recovery after parturition; so that, as a rule, defective involution was only recognised when time had confirmed and made it more difficult to cure. 3. The measures calculated to prevent parturition being a frequent source of metritis, were represented to be the logical deduction of the right appreciation of the damage done to the womb by parturition; and it was strongly urged that when, at the end of four or five weeks after parturition, notwithstanding fair nursing, food, wine, and tonics, women still continued weak, with persistent back-pain and muco-purulent or red vaginal discharges, instead of blindly trusting to nature, it would be wiser to ascertain, by an accurate examination, whether the inability to recover health did not depend on one of those organic lesions that could not be cured without the calling in of surgery in aid of nature. The same line of conduct was advised when women were recovering from parturition who had previously suffered from uterine disease, on account of its liability to relapse. The unusual severity of uterine inflammation that originated in abortion was said to depend on the absence of definite rules of conduct to be observed by women after miscarriage, and on the little care they then took of themselves; whereas Dr. Tilt wished the profession could persuade the public that a month of convalescence was not too much to exact after a moderately bad miscarriage; and that if, at the end of that time, a patient did not recover strength, could not walk, had pelvic pains and a red or muco-purulent vaginal discharge, the cause of these symptoms should be carefully investigated. The author stated the difficulty of curing defective uterine involution to be in direct proportion to the time it had already lasted; and he therefore urged its speedy recognition. He recommended leeching the cervix if there were signs of active congestion of the womb, the internal administration of ergot and of iodide of potassium, the painting of the lower part of the abdomen with oleate of mercury, and vaginal injections. It was also admitted that the pregnancy had sometimes cured the mischief done by a previous one.

Dr. Tilt concluded by emphatically asserting that, by a judicious management of lying-in women, and of those recovering from abortion, uterine irritation and congestion would be reduced, and lacerations healed; and that uterine inflammation would be checked in its origin, and, at all events, its acuteness and duration would be greatly diminished.

Dr. Steele (Liverpool) doubted the utility of vaginal injections as curative agents in inflammation within the cavity of the cervix or uterus, which could only be successfully combated by medication at the seat of the disease. He also thought there would be some difficulty in so localizing internal metritis as to justify the term placental ulceration.

Dr. Thomson (Edinburgh) believed that subinvolution was a frequent cause of uterine ailment.

Mr. Bracey (Birmingham) endorsed many of the views expressed in the paper, which he regarded as a most valuable communication. He understood that vaginal examination was recommended only when convalescence did not proceed favourably.

Obstetrical Journal.

THE VALUE OF CROTON-CHLORAL HYDRAT.

Dr. B. Baker writes to the *British Medical Journal*:—

The profession and the public are chiefly indebted to Dr. Oscar Leibreich for the introduction of chloral hydrate; and this obligation is further increased by the addition of croton-chloral hydrate, which will doubtless prove an equally valuable therapeutic agent. It is of the greatest service in cases of nerve-pain. Every sufferer from neuralgia is anxious to obtain speedy relief from pain; this may be obtained by taking croton-chloral hydrate, and then the antecedent causes of the neuralgia may afterwards be inquired into and treated accordingly. The following cases are interesting, as showing the immediate relief from pain that this drug affords.

A. suffered from facial neuralgia of a most severe character; it affected her hearing and eyesight. She could not rest or take food. She took one grain of croton-chloral hydrate every hour. In three hours she was considerably better. After taking three more doses, she was entirely free from pain.

B. suffered much from facial neuralgia dependent on decayed teeth, and had not been able to take food or sleep for three days. She was ordered croton-chloral hydrate in grain-doses every hour, and obtained great relief after two doses. Six doses removed the pain completely. She slept that night.

C. This patient suffered from concussion of the spine, caused by a railway accident some years ago. She has had every variety of treatment for the pain she suffers in the spine and the nerves proceeding therefrom. She took potassium bromide gr. twenty, and croton-chloral hydrate, gr. one, three times a day, with marked relief and no bad symptoms.

E. This is a young dyspeptic and neuralgic patient, and suffers greatly from dysmenorrhœa. She took two-grain doses when the paroxysms of pain came on, with marked relief.

F. has been under treatment for various neuralgiæ for some years. She has had, at one time or another, almost every external and internal therapeutic agent in the *Pharmacopœia*; strychnia, iron, quinine, ammonium, chloride, aconite, belladonna, iodine, bromine, blisters, hypodermic injections, gal-

vanism, together with baths and other hygienic appliances, including change of air. In this case, two-grain doses of croton-chloral hydrate every hour afforded more speedy relief from pain than any of the above remedies. After taking eight grains, she was almost free from pain.

In thirteen patients who have taken croton-chloral hydrate, not a single bad symptom has been observed. In grain-doses, it relieves pain quickly; causes natural sleep; no subsequent headache or furred tongue. In several cases it acted as a gentle laxative.

SHOCK AND SYNCOPE.

(*The Practitioner*, October, 1873.)—Dr. T. Lauder-Brunton, in an able paper, reviews the causes, symptoms, pathology, and treatment of shock and syncope. He believes painful impressions—more especially extensive burns—injuries to bones, and, above all, injuries to the abdominal viscera and genitals, to be the principal causes of shock, which is usually attended with pallor and coldness of the skin, weak pulse, oppressed and sighing respiration, dilated pupils and sickness. There are two chief factors in the production of shock; first, the stoppage of the heart from the paralyzing influence of a sudden and violent injury to the nerves, and second, as a result of the same influence, dilation of the vessels, particularly those of the abdomen. These two enable us to account for all the observed symptoms,—the weak pulse, the low arterial tension, the pallor and coldness of the surface, etc.

Syncope probably depends chiefly on dilatation of the arterioles, and its duration is less than that of shock, because of the greater contractility of these vessels than of the veins.

In the treatment of shock we endeavor to counteract the feebleness of the heart by stimulants—one of the most powerful of which is heat; so we apply warmth to the surface, especially over the cardiac region, and at the same time give brandy and ether internally. A still more important indication is to cause contraction of the great veins in the abdominal and thoracic cavities, so that the blood, instead of stagnating uselessly in them, may be sent onward to the heart. Painful impressions on the sensory nerves will often have this effect,—strong mustard plasters, thrashing the feet and legs with switches, etc. Digitalis, as possessing the power of contracting the vessels and strengthening the pulsations of the heart, is of great value, and should be given freely. In syncope the first idea is to restore the circulation to the brain; and this we do by laying the head on a level with the body or even somewhat lower. The next thing is to raise the blood-pressure; and, as the condition is due to dilatation of the arterioles of the surface, we pursue a plan of treatment directly opposite to that employed in shock, and dash cold water in the face and chest and hurry the patient from a warm room into the cold air, in order to cause contraction of those vessels. For the same reason we apply ammonia or aromatic vinegar to the nose.

AN ABORTIVE METHOD OF TREATMENT IN CERTAIN CASES OF CORYZA AND ACUTE INFLAMMATION OF THE FRONTAL SINUSES.

BY J. S. PROUT, M.D., OF BROOKLYN, N. Y.

I will say nothing of the symptoms of coryza, as probably all of my readers have had one or more attacks; but will remark that, in my own experience, the characteristic symptoms of frontal catarrh, as I call the inflammation of the frontal sinuses, are a dull, heavy frontal ache, not to be accounted for by the coexistence of gastric disturbance or *biliousness*, and a very painful feeling of distention in the frontal region in stooping forward.

The treatment is unsatisfactory to a high degree. Niemeyer, in his Text-Book of Practical Medicine (Translation, Vol. I., p. 291), says: "Various abortive methods of treatment for acute nasal catarrh have been proposed; but none of them" (he mentions six) "have obtained general approval." Among other things he recommends the Russian bath.

Cohen, in his excellent work on the Diseases of the Throat, mentions various remedies that may be tried. He speaks of three, any one of which will generally cause a coryza to abort: 1st, a grain or so of opium; 2nd, a dose of alcohol at bed-time; or 3rd, the inhalation of chloroform.

We may try these means on ourselves, if we choose, but for obvious reasons we cannot trust our patients with them.

We need a remedy that is safe, easy to use, that we can put into the hands of our patients without fear of unfortunate results, and that does not waste our time; a remedy that physicians in their own persons, as well as the laity, will not consider worse than the disease itself.

Let me, then, without further introduction, state that I have, in my own person, and with patients, often been able to arrest the disease in the course of an hour or less, by taking or giving large doses of the officinal tincture of the chloride of iron, 20 or 30 minims, as soon as possible after the cold is "caught." I generally find that in about half an hour there is a decided amelioration of the symptoms, which may be permanent, in which case I take or give no more of the tincture, or the improvement may pass off in two or three hours; in which case the dose must be repeated. This may be required three or four times.

I have had numerous attacks of frontal catarrh, which I have thus caused to abort. I have had the same good fortune with coryzas accompanied by sore-throat.

In other cases, perhaps on account of greater severity or from delay in commencing the treatment, I have not obtained permanent benefit from the use of the tincture. In my hands, therefore, it is not a specific.

On the 21st October of this year, I called the attention of the members of our County Medical Society to this method of treating coryzas. I have recently received a note from a member of the Society, Dr. Edson, who was present at the meeting referred to, giving his experience in regard to it, which is so entirely satisfactory and in accord with

my own, that I prefer to copy it, as the record of an unprejudiced observer, rather than detail any of my own observations, which might appear unduly partial.

He writes (Nov. 28th):—

"Mr. B., a lawyer, has for years been particularly subject to colds, with frontal headache, difficulty in respiration, and the other usual attending symptoms. He usually spoke of himself as being a sufferer from catarrh. During the months of August and September his affection generally assumed a severer form, not very unlike hay-asthma.

"Upon returning home on the evening on which you spoke before the Medical Society of the successful use of the muriated tincture of iron in similar cases, I found Mr. B. in the early stage of one of his attacks, 'sneezing and wheezing,' with creeping chills, eyes suffused, &c., &c., presenting that peculiarly disconsolate appearance so general in this complaint. I suggested to him to try the tincture in half-drachm doses, repeated if necessary. In less than half an hour after taking the first dose he expressed himself as feeling decided relief. Another dose in due time, and his attack was cut short, decidedly aborted. Since that time, whenever he feels the hand of his old enemy upon him, he takes a timely dose of the tincture, and thus far with the happiest results.

"This is one of the several cases in which I have prescribed this remedy for similar affections, and with such marked advantage that I have great confidence in its efficiency in this class of cases.

"Yours very truly,

"B. EDSON, M.D.,

"140 Park Place."

What need I say more to obtain for it a trial?

A convenient form for extemporaneous prescription is—

R. Tinct. ferri chloridi,
Glycerinæ, ʒi. ʒ iv.
M.

S. One teaspoonful in a wine-glassful of cold water, through a glass tube, to be repeated according to circumstances. The glycerine in part conceals the iron taste.

There is a slight diuretic action. I have found no unpleasant effect on the bowels, and only a slight feeling of discomfort, which soon passed off, when it was taken on an entirely empty stomach.

How are we to explain this action of the iron tincture? Dr. T. Clifford Albutt, an excellent observer, says: "In iron we have two kinds of value; its value in ordinary small doses and in mild forms" (he is speaking of neuralgia). "when it removes simple anæmia; and its value in large doses—doses such as half a drachm to a drachm of carbonate of iron, or of twenty to thirty drops of the sesquichloride tincture—when it seems, apart from the presence of any definite anæmia, to have a *special effect in modifying the morbid state of nerve-tissue*."—(Liverpool and Manchester Med. and Surg. Reports, 1873. Quoted in Braithwaite's Retrospect, July, 1873, p. 41.)

Let the last eleven words (*italics my own*) of this quotation, then, for the time being, explain how it is that 20 or 30 minim doses of the tincture of the chloride of iron abort coryzas.

December 3rd, 1873.

ACTION AND USES OF CROTON-CHLORAL HYDRATE.

BY OSCAR LIEBREICH, M.D., Professor of Materia Medica in the University of Berlin.

I have the honor of directing attention to a new remedy, which serves to corroborate the theory I have propounded with respect to the action of hydrate of chloral.

When chlorine gas acts on aldehyde, croton-chloral is formed, as has been demonstrated by Dr. Kramer and Dr. Tinner. In order to avoid a mistake which is apt to be caused by the name, I must here remark that this body possesses no relation whatever to croton-oil, although its chemical constitution proves it to be the chlorated aldehyde of crotonic acid. Croton-chloral differs in its outward appearance from hydrate of chloral, differs widely from the latter with regard to its physiological effects. Four *grammes*, or a drachm, of this substance, dissolved in water, and introduced into the stomach, produce in the course of from fifteen to twenty minutes a deep sleep, accompanied by anæsthesia of the head. Whilst the eyeball has lost its irritability, and the nervus trigeminus shows no reaction whatever on being irritated, the tone of the muscles remains unaltered.

I have experimented with this remedy on maniacs during an attack of mania. They remain quietly sitting on their chairs in a deep sleep, their pulse and respiration being unchanged for two whole hours together. If anæsthesia had reached so high a degree in consequence of the application of hydrate of chloral, the patients would have dropped from their chairs, and both their pulse and respiration would have been considerably retarded. I have seen croton-chloral acting in the same way on healthy individuals. In some cases of tic douloureux, the remarkable phenomenon is exhibited that pain ceases before sleep sets in. I am sorry to say, however, that this remedy acts only as a palliative in this dreadful disease. I nevertheless prefer its action to that of morphia, because it has effects as good as the latter remedy, without being so detrimental to the constitution in general. I have never observed any unfavorable effects of croton-chloral on the stomach or any other organ, although I have made frequent experiments with it.

The indications for the use of this remedy are to be found—1. In cases where hydrate of chloral is inapplicable on account of heart-disease; 2. In cases of neuralgia in the district of the nervus trigeminus; 3. In cases where very large doses of chloral are necessary to produce sleep. I there recommend the addition of croton-chloral to hydrate of chloral.

Whilst examining the difference between the action of hydrate of chloral and that of croton-chloral, I have discovered the remarkable fact that it is not

the first, but the second, product of decomposition of the latter substance which is brought into action, on account of the first being rapidly destroyed. Croton-chloral, when subjected to the influence of an alkali, first forms allyl-chloroform, a trichlorated body, which is rapidly decomposed into a bichlorated substance which is called bichlor-allylene. Now, both chloroform and trichlorated substances act, as I have shown, in their first stage on the brain, in the second on the spinal cord, and in the third on the heart. The retardation of respiration is to be explained by the agency of these substances on the last mentioned organ. Bichlorated substances act differently, as is proved by bichloride of ethylene. Even if the circulation of the blood in an animal have been stopped by this latter agent for one minute, life may be restored by artificial respiration, which is impossible whenever trichlorated substances have produced this effect, in which case the muscles of the heart remain paralyzed. Well, in animals poisoned by croton-chloral to such a degree that both circulation and respiration are stopped entirely, artificial respiration is able to restore the action of the heart immediately, and the life of the animal may thus be saved. Bichlor-allylene, inhaled by the lungs, produces the same effect on animals as croton-chloral. We thus see these bichlorated substances acting on the brain, spinal cord, and medulla oblongata, but not on the heart, which explains the fact that both respiration and circulation remain unaltered in a man by a medicinal dose. It is a highly interesting fact, however, that under favorable conditions, we still are able to produce in animals the effects of the first product of decomposition of croton-chloral—i. e., of the trichlorated substance or of allyl-chloroform. In order to observe these effects, it is necessary to introduce immense doses of croton-chloral into the body, when paralysis of the heart actually does ensue.—*From the British Medical Journal*, Dec. 20, 1873.

THE APPLICATION OF COLD IN SCARLET FEVER.

Dr. George Bayles says, in the *New York Medical Journal*:—The extraction of heat by the application of cold is a recognized principle in practice, and the extraction of superfluous heat by the application of a heat-absorbing agent of any description, would not violate the principle. Through my friend, Dr. James R. Leaming, I have been made acquainted with the wonderful heat-absorbing properties of *theobroma* (cocoa-butter). I do not venture too much when I say that, for its refrigerent action in fevers of the major kind, it is an agent cognate to ice water. Its application must be frequent and lavish all over the cutaneous surface. It is absorbed so rapidly that a considerable time is required to so modify the general surface heat that any of it will remain upon the skin, thereby showing (when that is accomplished) the skin to have become, for the time being, supersaturated. The effect upon the patient is agreeable beyond expression, and I hope to see it supersede all other forms of inunction. That tossing violence of unrest and

distress is at once measurably decreased. The temptation to constant repetition of this inunction is only restrained by the salutary fear that the interior caloric is not diminished synchronously with that of the surface. That it should be more than desirable. This butter of cocoa has the rare advantage of being a valuable nutrient. Its liberal absorption by the skin is equivalent to a fair share of food taken into the stomach, and normally assimilated. During the desquamative stage it far surpasses lard or oils, being neither so disagreeably unctuous or offensive to the smell. Indeed the odor of the body after its use is positively agreeable. It always retains its massive form, ready to be laid aside like a piece of fragrant soap when, for the time being, no longer needed, and its application is, to the nurse, almost a pastime.

During the period of intensest febrile excitement, it is quite right to adopt a sort of *coup-sur-coup* course, so to speak, with this agent as heat must be withdrawn as rapidly as possible for the comfort and welfare of the patient. Once an hour is as often as I have ever applied it, though it might be used oftener with benefit in some cases, and once every three or four hours is the minimum frequency where it is needed at all. I see no reason why, for similar conditions in other diseases, this admirable, pleasantly-flavored, heat-absorbing agent may not be used with great advantage.

Cold to the head must not be overlooked. In a child it cannot be applied in the same direct and comparatively unguarded manner as can be done in the adult.

I have found it sufficient, and more than *tolerable* (being *positively agreeable*), to have pounded ice enclosed in a bladder, and either laid or suspended near the vertex. The air, for many inches around the ice-bag, will be several degrees cooler than the prevailing temperature of the apartment. This can be borne for an indefinite period of time, as it is not attended with the shock ordinarily produced by other more direct applications of intense cold. The shifting and changing so frequently required by other methods, to the great disturbance of the highly-excited or morbidly-conscious patient, are, by this method, quite done away with. On the small iron cots or cribs of the nursery, I have often hung the half-loaded ice-bag, within a few inches of the crown of the head, and induced thereby an undisturbed sleep for as much as an hour or more at a time. This refreshment has a value which we can all readily appreciate in the delirious or semi-delirious subject. Such practical matters relating to the management of the disease, in this stage of high vascular excitement and perturbation, may be more or less fully rehearsed at any subsequent period, calling for the resumption of measures similar to those adopted at the first. A relapse of the fever is as successfully treated by the means herein indicated as it is at the beginning, and for many reasons often the whole array of measures, such as are here suggested, are urgently demanded. For rapid reduction of abnormal temperature, I know of no better or more acceptable means.

BELLADONNA PLASTER IN OBSTINATE VOMITING.

Dr. Guéneau de Mussy recommends, in obstinate vomiting, diachylon plaster and theriac plaster, of each two parts, and extract of belladonna one part, the plaster being twelve centimeters in diameter. It may remain applied to the epigastrium for twelve or fifteen days without being renewed; and out of the thousands which he has employed the author has only met with one case in which an idiosyncrasy caused some ill effects to result. It is not meant to be asserted that this means always succeeds, but I have succeeded in a very great number of cases, either in entirely relieving vomiting or greatly mitigating it, some remarkable examples of which are alluded to in the paper. This success has encouraged Dr. Guéneau de Mussy to try the effect of the plaster as a prophylactic and curative in sea-sickness, and although as yet he has only tried it in four cases, he entertains great hopes of the benefit to be derived, and at all events thinks that so simple a remedy deserves further trial in so extremely painful an affection which has hitherto resisted all measures of relief. The first of these four cases occurred in the person of a young married lady, who never could place foot on a vessel without being tortured with sea-sickness, and who always landed in a state of exhaustion and semi-syncope. Having to make a voyage to Australia, she was advised to try the belladonna plaster, and after having had some vomiting on the first day, she, when last heard of, had traversed the Red Sea without sickness and in good health. A Brazilian physician, who had made several visits to Europe, and every time had been tormented by repeated and obstinate vomiting, and suffered greatly from this, eagerly adopted the plaster, and although in his last voyage the passage was a very bad one, he only felt slight nausea. A great personage of the same country was also a constant victim of sea-sickness, but on the last occasion he made the passage without any attack, and was able to walk the deck, which he had never done on any of the other passages. On board the same vessel was a lady in whom sea-sickness had produced, if not alarming, yet very distressing symptoms. One of the plasters was applied, and in the course of a few hours the vomiting, which had been incessant, completely ceased, so that the patient was enabled to join the other passengers on deck.—*Medical and Surgical Reporter*.

ANTICIPATION AND TREATMENT OF POST PARTUM HÆMORRHAGE.

By JOHN BASSETT, M.D., Professor of Midwifery to Queen's College, Birmingham.

After an active experience extending over five-and-twenty years, and a very careful examination of all the circumstances surrounding *post partum* hæmorrhage, I have arrived at the conclusion that the best method of anticipating it is to prepare the patient for her confinement by a course of medical treatment extending over a period of from four to six weeks, the basis of such treatment being the administration of iron. Of course, this can only be

done in those who are subject to flooding, and in those who are so out of health that they seek medical relief. I have found no difficulty in carrying out this plan, for those who are liable to flood are very glad to carry out any method which will prevent it. It is to this that I attribute the fact, that I have never had a fatal case of *post partum* hæmorrhage amongst my private patients, although I have unfortunately seen several in the practice of others.

As regards the treatment of hæmorrhage, the remedies are of two kinds—those which are immediately available, and those which require time and circumstances for their development. Ergot has been put prominently forward, and I have seen it answer admirably sometimes; but it is always somewhat uncertain in its action, and it may throw the uterus into a state of spasm. It has appeared to me on several occasions that, where the uterus has been shy and lethargic, it would have been better to leave it alone rather than to hurry it by the hand and ergot; but I do not think any positive rule can be laid down on this subject. Every accoucheur carries about with him nature's *tourniquet*: the human hand applied to the uterus is not only the most available, but the most efficacious of agents; and, if this do not answer, it is not difficult to transfer the pressure to the aorta, a proceeding which I have often seen of great service; then cold may be added as an excellent assistant to pressure; in certain cases, opium is a valuable remedy. The precise position which a solution of the perchloride of iron will occupy in the future, I cannot tell; it has not, in my hands, appeared to be so innocent an agent as, from what has been written about it, I had supposed; but, as my experience has been limited, I give no decided opinion.

I have written briefly, because I send herewith a paper on this subject which I had the pleasure of reading at the last meeting of our branch; in this, I have stated the result of my experience on this very important subject.—*Obstetrical Journal*.

TEDIOUS LABOUR FROM DEBILITY, AND ITS TREATMENT.

By Hugh Miller, M.D., Glasgow.

The remarks in this paper had reference solely to cases in which delay was due to enfeeblement or failure of the natural powers of the organs specially called into action during parturition. The writer held that the element of time should not be considered in the classification of labours, that it was unscientific to do so, and that uncomplicated labours should only be assumed to be unnatural when the pains were no longer active, and the labour non-progressive. After considering the powers of expulsion in a healthy woman, the author referred to the forces at work which prevented a high standard of health from being maintained in city life, and said that, in proportion as it was wanting, labour was prolonged in many cases. Labour in cities was thus frequently tedious from constitutional debility, so that even while it might be regular and its progress certain for

a time, the pains either lingered or became arrested through exhaustion taking place before the labour was completed. When symptoms of acute fatigue set in, the pains were short and sharp, and they recurred more frequently. The general indications for treatment were to support the strength before labour set in, and during the first stage, and, as soon as the pains indicated debility, to deliver with the forceps. The timely application of the forceps was preferred to ergot, because it seemed more reasonable to assist a weakened organ by giving help from without, than by applying a stimulant to an already overworked one. This practice, instead of inducing flooding, helped to prevent it, through preserving the power of the uterus from becoming exhausted; it also prevented inflammatory diseases of the passages, and the death of the fetus. In his private practice, he found one case in every twenty-six labours show symptoms of debility; and, since he had adopted the early application of the forceps, not one of the children so delivered was still-born.—*Obstetrical Journal*.

CONVULSIONS DURING LABOUR. FORCEPS. BROMIDE OF POTASSIUM.

By Mons. le Dr. Jalabert.

Last year the author was called to a primipara who had been in labour since the morning, and in whom convulsions came on at noon, continuing every quarter of an hour, without any return of consciousness in the intervals. Another doctor had bled largely in the evening with no result; the inhalation of ether also proved unavailing.

At nine o'clock the woman, alternately comatose and convulsed, was delivered by the forceps of a dead child. Fearing some spasm of the uterus the placenta was removed by the hand, which was followed by contraction; no hemorrhage of any account. From this time she remained comatose, but without any convulsion till eleven o'clock, when another occurred, followed by an hour's rest, and a second attack at twelve o'clock. She was then given the bromide of potassium in fifteen-grain doses every quarter of an hour. The attacks ceased. The woman remained comatose till five in the morning, when she showed signs of returning consciousness. Up to this time she had taken over 150 grains of the bromide, the doses having been given at longer intervals, and they were continued during the day. Abdominal pain now being complained of, the bladder was found to be full: a large quantity of dark-colored urine was drawn off, and all pain ceased. The patient regained her consciousness fully in the morning, and her recovery was uninterrupted. Is the bromide of potassium responsible for this happy result? It must not be forgotten that convulsions during labour are divided into three classes. In the first category the attacks are in nowise modified after the birth, the patient succumbing; in the second the attacks continue, but are less intense and more rare, a cure following; in the third the attacks cease. Can the bromide increase the number of cases in the two latter classes? Statistics alone

can answer this question; and as statistics depend upon facts, it was thought proper to publish these.—*Gaz. des Hôpitaux.*

TREATMENT OF ORCHITIS WITH NITRATE OF SILVER.

(*Pacific Medical and Surgical Journal*, Oct., 1873.)

Dr. W. E. Whitehead states that his plan of treatment for orchitis has been as follows: Rest in bed, and the application of a thorough coating of a solution of nitrate of silver—forty to eighty grains to the ounce—to the scrotum of the affected side, first having the scrotum well washed in soap and water; the administration of small doses of Epsom salts and tartar emetic dissolved in water, and repeated as often as once in four hours; support to the testicles and low diet. In some cases it is only necessary to make one, or at most two, applications of the solution of nitrate of silver to the scrotum; but sometimes it becomes necessary to paint once a day for three or four days before the swelling and pain are arrested. When the whole testicle is painful, hot, and swollen, stretch the scrotum over it gently, and then apply the solution with a camel's hair brush; but when the testicle is not so seriously implicated, merely draw the scrotum lightly over the epididymis portion, and apply the solution in the same way. One application is generally sufficient to relieve the extreme pain and at once arrest the inflammation and distressing sense of tension in the testicle, and the lumbar pain that follows the course of the spermatic cord. When the inflammation runs high, give tartar emetic in nauseating doses, otherwise in much smaller quantities.

DEPRESSED STATE OF THE BAROMETER AS A CAUSE FOR FRONTAL HEADACHE.

I have lately been reminded of a fact that I have observed in different parts of the world—viz., that some relation exists between a depressed state of the barometer and the prevalence of frontal headache; and although this fact has doubtless been observed by others, I believe that it is not generally known, and that its communication may prove interesting to some of your readers.

During the first five days of this month the barometer was exceedingly low, ranging from 29° to 29.30°, or 29.40°, and three members of my household and several of my acquaintances suffered from frontal headache of a more or less intense kind, and in addition to the headache, a sense of general languor and a slightly bruised sensation of the lower extremities. The headache was somewhat alleviated by the exhibition of guarana powder. This is the only instance in which I have observed the two phenomena concurrent in our latitudes.

I beg to leave the explanation of this phenomenon to abler men, and content myself with stating the fact.

I am, &c.,

FREDERICK IRVING DE LISLE, L.R.C.P.

Physician to the Hospital of St. Peter Port, Guernsey.—*Times and Gaz.*, Dec. 23, 1873.

WHAT IT COSTS TO SUPPORT HOSPITALS IN NEW YORK CITY.

According to the official estimates for 1873 we have the following: *Department of Charities and Corrections*:—Out-Door Poor Department, \$128,066; Bureau of Out-Door Sick Poor, \$5,300; Bellevue Hospital, estimated number of patients 700, \$103,370, or \$147.67 each patient; Charity Hospital, estimated number of patients 950, \$133,302, or \$140.31 each patient; Hospital for Contagious Diseases, 180 patients, \$20,667; Fever Hospital, 60 patients, \$6,179; Small-Pox Hospital, 175 estimated inmates, \$24,950; Hospital for Incurables, \$13,393; Asylum for the Blind, 150 inmates, \$8,055; Convalescent Hospital, 250 inmates, \$22,041; Lunatic Asylum, 1,300 patients, \$119,919, or \$92.25 per patient; New York City Asylum for Insane, 650 patients, \$83,026, or \$127.72 per patient; Hospital for Epileptic and Paralytic Patients, 120 patients, \$13,172; Hospital for Infants, 450 children, \$51,780, or \$115.06 per child; Randall's Island Nurseries, 650 inmates, \$61,282, or \$93.58 per inmate; Nursery Hospital and Idiot House, Randall's Island, 450 inmates, \$47,887; Inebriate Asylum, \$23,611; Reception Hospital, Centre street, \$10,180; Reception Hospital, 115th Street, \$5,920; Ambulance Establishment, \$3,995; General Drug Department, salaries, \$2,500. Total, \$888,595, as the estimate for the above hospitals, etc., Department of Charities and Corrections.—*N. Y. Record*, Dec. 1, '73.

ABORTIVE TREATMENT OF BOILS.

The *Cincinnati Lancet and Observer* has a note from Dr. C. B. Hall, stating that the following, applied to boils, with a camel-hair pencil or feather, gives great relief in a very short time. The inflamed surface, and a little beyond all around, should be painted with the medicine every fifteen minutes, or as fast as it dries, till a good thick coating covers the part. The throbbing, tensive pain, and the intense tenderness will be promptly relieved; the redness will subside; the smooth, shining integument will shrink and become wrinkled, and comfort will succeed torment. If the boil is in the first stage, it will disappear without sloughing. If the slough has already formed, it will be quickly separated, and the cure soon complete:

R.—Tr. arnica flowers, ʒi;
Tannic acid, ʒss;
Gum acacia pulv., ʒss. M.

It should be used as soon as prepared.

EUSTACHIAN OBSTRUCTION IN CHILDREN.

Mr. Dalby says, in his late work on the Ear, that this is a common affection, the mucous membrane of the nares, fauces, and Eustachian tube being affected together. The mucous membrane throughout is thickened and tumid, and secretion from the surface is much more abundant than it should be. The tonsils are generally enlarged, and sometimes to a very considerable extent. Of such children it is

hardly necessary to ask what is the matter. The stupid vacant look as they advance with open mouth, and their generally flabby appearance proclaim their disease. They snore loudly in their sleep, and the deafness is generally severe. The tympanic membrane will be seen to be drawn in, but to retain its proper translucency; as a rule there is no tinnitus. It is surprising for what a length of time this state of things will go on with children and yet permit of complete recovery; while, on the other hand, in the case of adults, when the Eustachian tube is obstructed from a relaxed condition of the mucous membrane, the tympanum will generally become involved if they are not attended to soon after the deafness is noticed. The treatment to be adopted for these young patients is to apply astringent solutions locally to the fauces, tonic medicines (preparations of iron and the mineral acids), plenty of fresh air and exercise, together with the ordinary rational means of improving the health.

THE DOCTOR AND THE DEBTOR.

How different the reception a physician meets with when he hastens to respond to an urgent summons, and when he calls to present an over-due bill, is only too familiar to us, and was equally so to our predecessors. Enricus Cordus, who died A. D. 1535, doubtless told his own experience, as well as that of his apostolic succession in the healing art:—

"Tres medicus facies habet; unam quando rogatur, Angelicam; mox est, cum juvat, ipse deus: Post ubi curato, poscit sua prœmia, merbo, Horridus apparet, terribilisque Sathan."

Which may be translated:

"Three faces wears the doctor: when first sought, An angel's, and a God's the cure half wrought; But, when that cure complete, he seeks his fee, The devil's then less terrible than he."

REMEDIES FOR FURUNCULOSIS.

The tendency to the frequent recurrence of crops of boils and styes is in some cases extremely annoying. M. de Savignac says he has always succeeded in effectually checking them by the alternative use of glauber salts and arsenic, the latter constitutionally, the former as an occasional purgative.

SNUFF FOR FACIAL NEURALGIA.

Dr. Scriffigano recommends:

R Quin. citrat. ʒj.
Strong tobacco snuff, ʒ iss.

Sig. To be used as required in neuralgia.

IMPROVEMENT IN THE ADMINISTRATION OF PERCHLORIDE OF IRON.

DR. HERBERT L. SNOW (*Br. Med. Jour.*, June 28) says that the metallic, astringent taste long

remaining in the mouth after the administration of tincture of perchloride of iron may be completely avoided by the addition of a small quantity of glycerine, about half an ounce to an eight-ounce mixture being ordinarily sufficient.

In the same journal of July 5. Dr. Alex. Boggs, of Paris, recommends glycerine not only for this purpose, but also as an addition to remedies which have a tendency to constipate the bowels, its action being mildly aperient, and also on account of its solvent powers, which exceed those of syrups.

NOVEL USE OF THE STOMACH-PUMP.

In an obstinate case of constipation which had resisted all manner of remedies, it finally occurred to the physician to introduce the pipe of the stomach-pump into the rectum, and make use of the instrument as an aspirator. The result was, at first, a large amount of wind was drawn off, which was soon followed by an extraordinary discharge of feces. With each stroke of the pump, the abdomen could be seen to diminish sensibly in volume, and complete relief was afforded.—*Il Raccog. Med.* No. xxiii., 1873.

LIQUID NOURISHMENT FOR SICK STOMACH.

The *Dublin Medical Journal* commends the following: An egg well beaten up, to which add one pint of good milk, one pint of cold water, and salt to make it palatable; let it then be boiled, and when cold any quantity of it may be taken. If it turns into curds and whey it is useless.

STYPTIC COLLODION.

The following will be found a most useful formula:—

Tannin 2 ozs.:
Alcohol 4 ozs., fl.;
Ether 12 ozs., fl.;
Soluble cotton . 1 drachm and 2 scruples;
Canada balsam 1 drachm.

Dissolve the tannin in one part of the alcohol, and other with the Canada balsam; then add the cotton.—*Dublin Medical Press and Circular.*

PEPSIN IN OYSTERS.

It appears from some experiments made by Mr. E. H. Haskins (*Boston Medical and Surgical Journal*), that raw oysters contain pepsin enough to *digest themselves*. No wonder oysters agree with most dyspeptics.—*Detroit Review*, Dec., '73.

INCONTINENCE OF URINE.

DR. HOLMES COOTE, of St. Bartholomew's, recommends for incontinence of urine in children, one minim of creosote three times daily, combined with assafœtida and rhubarb pill, of each two grains.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, JANUARY, 1874.

POISONING FROM COLCHICUM WINE.

On the 24th of November last one of Montreal's street arabs stole from an express waggon a large bottle, which eventually found its way into the house of a man who resided in miserable quarters. It was pronounced to be wine, and on the afternoon of November 25th some seventeen persons were called in. This bottle was again produced, and being placed to the nose of experienced ones was again pronounced wine, when a carousal began. In half an hour the contents of the bottle disappeared, all being drank, except a few ounces which were carried away by one of those who had partaken, for the purpose of treating a friend. Very shortly after, those who had drank it began to grow ill, and no wonder, for the contents of the bottle was Vinum Colchicum, made by Evans, Mereer & Co., and the bottle was on its way to the General Hospital when it was stolen. It was not till the next morning (26th November) that medical assistance was called in to one of the sufferers, and as no history of the drinking was given, a correct diagnosis was not made. It was noon of the same day when information of what had occurred reached the police authorities, who at once furnished them with medical assistance. Dr. Major was taken to the sufferers, who at this time were seventeen in number, and he assumed charge of all the cases, assisted by several other medical men. By evening seven deaths occurred—the remaining ten happily have got over it. Dr. Major has published the cases at great length in the *Canada Medical and Surgical Journal*. As they are exceedingly interesting we give the following Resumé of the symptoms:—

“In from 45 minutes to one hour and a half after taking the wine, vomiting ensued. The contents of the stomach were first rejected, then bile or mucus; afterwards a fluid similar to “rice water” of cholera.

When the amount of poison taken was very great, the purging came on simultaneously with the vomiting,—but if only a small quantity, comparatively speaking, had been swallowed, the evacuation of the bowels was delayed for several hours. The passages were first the natural fœces, then bilious stools, next “rice water,”—a very large amount of a frothy, slimy secretion, compared by one of the patients to clean soap suds. In no case were there any traces of blood to be found. The vomiting continued until the last moment in the fatal cases, and the bowels were emptied involuntarily. Cramps were severe in the stomach, bowels and legs. Severe pains were felt in the knee joints in some. And in two cases very markedly in the left shoulder, so much so, indeed, as to be a continual cause of complaint, and avoidance of lying on the left side. Rubbing was frequently demanded for relief. In the majority there was numbness from the elbow to the wrist; cramps of the fingers, especially the second finger, and in one case extreme numbness of the thumbs under the nails. This latter peculiarity was present even for twenty-six days after. In the case of the boy Thayer, there was great pain between the shoulders. The features (twenty hours after the accident) were pinched and drawn, lips and nose blue, as also the lobes of the ears. The eyes were congested, pupils dilated slightly; voice hoarse and husky, and pain was experienced in speaking.

Feet and lower extremities icy cold, as also were the hands and arms. The rest of the body had a warmish clammy feel, but was below the normal temperature. The pulse was rapid, 125 to 145 or more in the minute, small, compressible, intermitting, and at times imperceptible at the wrist, though it could be found at the elbow with some trouble. The temporal arteries were difficult of detection, even the carotids required patience to distinguish. For several hours before death they were almost pulseless, the heart's impulse was not to be felt over the chest, and even with difficulty heard on applying the ear to the chest wall. The sound might be likened to a blowing sound, or a murmur, or to a heart heard at a very great distance, or through a stone wall, both sounds lapsing into one.

Respiration was full and easy, and was well maintained throughout. The pulse respiration ratio was borne out throughout.

The sufferers were sensible to the last and throughout. One case terminated with a slight convulsive effort. All sat up before dying, falling back in less than an instant. No headache was complained of.

Muscular strength was retained. They were all able to sit up, lift a cup to their lips, or even walk.

They were perfectly sleepless. In two recoveries there appeared a pustular eruption on the face and lower extremities, resembling in its character poisoned wounds.

In the case of the boy Thayer, while sawing wood, an hour after drinking the wine, he was seized with violent retching and vomiting succeeded by a "fit," which from the description resembled a convulsive attack. Thumbs were turned in, with the fingers closed over them.

The amount of wine taken varied from one mouthful to 15 or more ounces.

The symptoms in every case were proportionate to the amount of wine taken.

All the fatal cases terminated in from 19 to 28 hours.

After death the features assumed a placid, quiet expression; dependent parts of the body were tinged blue."

We regret deeply that no *post mortems* were allowed, as it will in all probability be many a long day before another such opportunity will occur to ascertain the pathological conditions present in poisoning by colchicum wine.

THE LATE DR. CHARLES SMALLWOOD.

Within the last few years death has made sad inroads among our profession in the city of Montreal. Every now and again we have had to chronicle the decease of some of our number, and this month the melancholy duty again falls to us. This time, a veteran in the profession has fallen, and we all mourn his loss. We allude to Dr. Charles Smallwood, who departed this life on Monday morning, the 22nd of December, 1873.

We are sure that few announcements of the kind could excite more real and general sorrow, for Dr. Smallwood was for more than an average lifetime not only influentially identified with nearly every public and philanthropic movement amongst us, but also by innumerable acts of unostentatious kindness endeared to thousands who are living or who have passed away. We may well cherish his memory as that of one among us who was known and highly esteemed far and wide in the world without us. Canada shares with all newly and partly settled countries the disadvantage of contributing but sparsely to the world's advancement in scientific knowledge, and of only adding an occasional name to the roll of explorers and discoverers of the secrets of nature. Still

we have made our contribution; we have added some names to the honorable roll of scientific "men of the times," though they have of necessity been few. Among them the name of Dr. Smallwood will ever occupy a foremost place.

Dr. Smallwood was born at Birmingham, England, in 1812, where he received his medical education. In 1833 he came to Canada, and took up his residence at Isle Jesus, where he established a meteorological and electrical observatory and made some important discoveries. About the year 1860, he removed to Montreal, and very soon obtained a most extensive practice, which he continued to attend to until a very few weeks previous to his death. About the time that he settled in Montreal he was appointed to the Professorship of Meteorology in McGill College, a position, however, of honor more than one of active work. In January, 1871, in conjunction with Drs. David, Hingston, Trenholme and F. W. Campbell he organized in Montreal a new School of Medicine, which, in the following March, was accepted by the University of Bishop's College as its Medical Faculty. At the first meeting of the Faculty he was elected to the position of Dean and Professor of Midwifery, &c., which position he continued to fill till the middle of June, when he tendered his resignation, upon the ground that he had just received an appointment from the Signal Office of the United States War Department, and from the Canadian Marine Department, which would fully and completely occupy his time. This terminated his duties in connection with the school, but up to the day of his death, he took an active interest in its welfare. He was for many years, about his middle life, an active contributor to Medical and other scientific journals, but of late years, increasing infirmities and constant occupation prevented his doing as much in this way as he desired. He was one of those who took a prominent and lively interest in the first appearance of this Journal, and in every possible way advanced its interests. Upon many occasions we were sensible of his valued advice. As a scientific man he was far too widely known for eulogy. Probably no Canadian has contributed more diligently to the development of the one department of physical science, viz., Meteorology, to which he mainly devoted his attention, than Dr. Smallwood. The value of his observations has often been acknowledged in official reports and by the public press. He was thoroughly devoted to the Church of England of which he was a member, and to whose courts he was from year to year elected to serve as a lay delegate. Yet he was tolerant as regards the views of others, and perhaps

few men of the Protestant faith ever had more sincere friends among the Roman Catholic priesthood than he had. His death, although somewhat sudden when it did come, had been for several weeks looked upon as a contingency which could not be a great way off. His disease was dropsy, due to hepatic obstruction, and the immediate cause of his death profuse hæmatemesis. At the time of his death he was one of the Governors of the College of Physicians and Surgeons of Lower Canada, and occupied many other prominent professional positions.

LOUIS BOYER, M.D.

Dr. Boyer died on the 15th of January after a protracted illness of several months, and his remains were entered in the Côte des Neiges Cemetery, on the morning of the 17th January, followed to their last resting place by a large number of his professional friends. He graduated at McGill College in 1842, and almost immediately filled the position of House Surgeon to the Montreal General Hospital. About 1844, he proceeded to Europe, passing some two years in the French Capital, returning to Montreal in 1846. In 1847, in conjunction with Dr. Fenwick and a few others, he started the Montreal Dispensary, which is to-day in a very flourishing condition, and remained upon its attending staff till about the year 1866, when he retired. In 1848, he was selected to fill the chair of Medical Jurisprudence in the Montreal School of Medicine and Surgery, which position he most creditably filled till 1860, when he resigned. He never very actively engaged in general practice, his means being sufficient to render him independent. By those who knew him well—he was much esteemed by every one—he was the true type of a perfect gentleman.

MONTREAL SCHOOL OF MEDICINE AND SURGERY,
MONTREAL BRANCH (VICTORIA COLLEGE.)

We understand that serious difficulties arose the first part of December between the students of this Medical School and its Medical Faculty, one of whose members was so obnoxious to the class, that they positively refused to listen to him. The result was the closing of the school, and the expulsion of some five or six of the students. The school reopened about the 13th of January, the difficulty being about that time arranged in a manner satisfactory to the students. It is understood that at the close of the present session Dr. Beaubien will retire, and that his place will be occupied by Dr. Arthur Ricard.

WESTERN HOSPITAL, MONTREAL.

The charter for this new General Hospital has passed the Legislative Assembly of the Province of Quebec.

GOVERNMENT GRANTS TO MEDICAL SCHOOLS.

The Medical Faculty of Bishop's College have been placed on the list of those schools which receive Government aid. Five hundred dollars was voted them on the supplementary estimates. Laval and McGill College and the Montreal School of Medicine have been voted the usual grant of seven hundred and fifty dollars.

SMALL POX.

This terrible disease still continues its ravages in Montreal, its fatality entirely confined to those who have neglected to make use of vaccination and re-vaccination. Week after week we read the same melancholy tale, with a gradually increasing number of victims. The small pox accommodation of the Montreal General Hospital has more than once been so full as to necessitate the refusal of patients, and yet in spite of all this, we do not hear of anything being done by our Health Committee with regard to a Small Pox Hospital. This state of inaction is positively outrageous; lives are being sacrificed, the disease is spreading, each new case is a focus, from which it will multiply. We know the position which they occupy is a delicate one, but if they will only act according to the dictates of common sense, entirely uninfluenced by outside pressure, we have no fear of the result. We must have one hospital, open, alike to all, the Catholic, the Protestant, the Jew or the Pagan. The idea of two hospitals should not be entertained—such, at all events is our firm conviction.

TO OUR EXCHANGES.

Ever since the *Record* was issued, now about a year and a half, we have forwarded one to all those exchanges which we received when connected with the *Canada Medical Journal*. Quite a number, however, have never sent their Journal in return. Would editors of Medical Journals, who read this paragraph, kindly see whether we are on their exchange list.

TO CORRESPONDENTS.

P.—We have seen the paragraph you refer to in the *University Gazette*. It is a mixture of untruth

with the most bare-faced puffing. We do not believe that either of the medical gentlemen named had anything to do with it. It was evidently the gushing effusion of some embryonic Esculapius, who wielded the editorial pen for the first time. The way in which a prominent member of the Hospital staff was extinguished by him was quite refreshing, although not by any means complimentary to the writer's regard for truth.

THE CANADIAN MEDICAL TIMES.

We announce with regret, although not with surprise, that the *Canadian Medical Times*, published weekly at Kingston, Ontario, by Dr. Neish, has suspended publication after a brief existence of six months. In its last issue the editor says, "the experiment of a weekly Medical Journal hitherto untried in Canada, has met with a certain amount of success and encouragement, but not with sufficient to warrant its continuance." We are not surprised at this statement, for a ten years experience as an editor of a Canadian Medical Journal has satisfied us that the time for a weekly publication has not arrived. We regret it, but the fact has been so patent to us that we confess that we looked upon Dr. Neish's venture as a bold one. It was likewise, we must say, a somewhat rash one, for when a weekly Journal is called for, it must come either from Toronto or Montreal. During the issue of the *Times*, its editor wielded a vigorous and an active pen. We trust, however, that he will not allow it to remain silent; but will contribute freely to the Medical Journals of the Dominion.

MEDICAL DEPARTMENT CANADIAN INSTITUTE, TORONTO.

The annual meeting of this Society was held on the 16th January, when the following officers were elected: Dr. Oldright, Chairman; Dr. Archibald, Secretary; Drs. Fulton, Agnew and Coleman, Committee.

DEATH OF THE SIAMESE TWINS.

Telegrams in the daily prints announce the death on the 17th of January, at Greensboro, North Carolina, of the celebrated Siamese Twins. Some time ago Chang became partially paralyzed, and seems to have taken to drinking liquor, from the effects of which he died. Eng then immediately became much excited and shortly after comatose, dying about two hours after his brother. We will look with much interest for the details, which will doubtless appear in some of our Southern Exchanges.

TO OUR SUBSCRIBERS.

It is our intention to furnish our subscribers next month with their accounts. Those who owe us for Volume I, as well as for the present one, will find them written in RED INK. If they do not remit by the end of this volume we will strike their names off our list. We hope that we will not have to do this to any; but it is really more than human nature can bear to issue and pre-pay our Journal to a subscriber for two years without having received the first sign of acknowledgment for it. We don't intend to continue it, so that all who receive *Red Ink* accounts, should remit at once if they wish to continue the *Record*.

We are late again this month, due to a fire at Buntin's paper mills, Valleyfield, which destroyed paper for us, and which we were unable to replace.

PERSONAL.

Dr. Arthur Ricard will, it is said, succeed Dr. Beaubien on the staff of the Medical Faculty (Montreal branch) of Victoria College, at the close of the present session. We rejoice at Dr. Ricard's promotion, for a more earnest, hard-working, and thoroughly competent member of the profession it would be difficult to find.

Dr. John R. Smallwood has been elected surgeon to the English Workingmen's Benefit Society, in place of his late father.

We regret to learn that our friend and class mate Dr. Frederick J. Austin, of Sherbrooke, has considered it advisable to proceed to Colorado for the benefit of his health. Previous to leaving he was presented with a purse of \$500. We understand that he purposes retiring in the spring. We sincerely hope the change will be beneficial, and that he will come back completely restored to health.

Dr. H. S. Cunningham (Bishop's College, 1872) is practising in Indianapolis, Indiana.

Dr. Rottot has retired from the editorial chair of the *L'Union Medicale*. Entire charge is assumed by Dr. Grenier, lately one of the assistant editors.

Reviews.

Clinical Researches in Electro-Surgery. By Drs. ROCKWELL & BEARD. William Wood & Company, 27 Great Jones Street, New York. Dawson Bros., Montreal.

The study of electricity as applied to medicine

and surgery is fast advancing, and now occupies a prominent position, but not more than what it deserves. The little work on "Clinical Researches in Electro-Surgery," by Rockwell & Beard, is a new addition to the literature of the subject, and its value is not to be determined by its size, as it will well repay perusal. It consists of nearly altogether of cases submitted by them to electrolysis. The cases mentioned in the first half of the work were those suffering from the various kinds of tumours, some of which were malignant. The results of the treatment are faithfully given, whether successful or not. In the latter half of the book cases of skin diseases are described where the treatment by central galvanism alone was followed, and no application made to the diseased part whatever. In their hands it appears to have succeeded exceedingly well. The authors prefer the former to the latter method. At the end they give the comparative advantages of electrolysis and galvano-cautery. Both may be used to accomplish some of the same indications.

A Hand-Book of the Theory and Practice of Medicine, by Frederick T. Roberts, M.D., B.Sc., M.R.C.P., Fellow of University College, Assistant Physician to University College Hospital, Philadelphia. Lindsay & Blakiston, Philadelphia, 1874; Dawson Brothers, Montreal.

This volume, which has been upon our table for about a month, is a work which after a very careful examination we can strongly recommend, not only to students, for whom it has mainly been prepared, but to general practitioners, whose limited time does not permit them consulting more extended and exhaustive treatises upon Practice of Medicine. The extreme difficulty of condensing within a thousand pages in a clear and comprehensive manner a descriptive account of each disease to which the human body is liable, is easily understood; yet we venture to express the opinion, that but few have succeeded so admirably as has Dr. Roberts. A very important innovation has been introduced on the method which has usually been followed in manuals upon Medicine. Before describing the individual diseases of the several organs or systems, an outline is given of the clinical phenomena, which indicate a morbid condition of each, and of any modes of "physical examination" employed in their investigation, while the principal symptoms are considered in detail. This innovation is admirable, and constitutes a valuable feature of the work. To those of our readers who

may feel desirous of adding to their library a volume upon Practice to which they may refer with satisfaction, we can cordially recommend Roberts' Practice of Medicine. It is beautifully got up by Lindsay & Blakiston, the paper is clear and white, the typography splendid—in a word, it is an elegant volume. It can be ordered from Dawson Brothers of Montreal.

Laceration of the Female Perineum and Vesico-Vaginal Fistula. By D. HAYES AGNEW, M.D. Philadelphia, U. S.

To those of our confrères who have not had the opportunity of reading the original papers upon the above subject—as issued some years ago in the Pennsylvania Hospital Reports, and the Medical and Surgical Reporter—their publication at the present time in book form will be very welcome.

The specialist will find this little brochure invaluable, as gathering up all the facts connected with the history of the subjects treated of, and ably pointing out the best methods of operating in order to secure success. To the general profession its pages cannot but be most acceptable and interesting.

A noticeable and instructive feature of the work is a record of a large number of cases operated upon, thereby presenting the reader with practical illustrations of the principles enunciated.

The numerous illustrations of the parts to which the work refers, and instruments used, as well as the general execution of the printing and binding, are very superior indeed, and do credit to the publishers, Messrs. Lindsay & Blackiston.

The work is to be had at Dawson's bookstore, St. James Street.

MARRIAGES.

On Dec. 17th, 1873, at the Eleventh Baptist Church, Philadelphia, by the Rev. W. Ward Willis, Alfred H. Henderson, of New Brunswick, Canada, and Lillie M., daughter of H. S. Potter, M.D., of Philadelphia.

DIED.

In Montreal, on the 22nd of December, Charles Smallwood, M.D., LL.D., D.C.L., aged 64 years.

In Montreal, on the 15th January, Louis Boyer, M.D., aged 55 years.

At Brattleboro, Vermont, U. S., in December, W. H. Rockwell, M.D., for thirty-six years medical superintendent of the Brattleboro Lunatic Asylum.

At Belle Riviere, Province of Quebec, on the 8th instant, John Barr, M.D., aged 73 years and 3 months, a native of Kilwinning, Scotland.

MONTREAL:

Printed by JOHN LOVELL, 23 & 25 No. St. Nicholas Street.

Original Communications.

A Case, under the care of Prof. E. H. Trenholme, of Apoplexy in a woman eight months pregnant. Cæsarian section immediately after death. Reported by DAVID A. HART, Student of Bishop's College, Montreal.

On the morning of the 25th November, 1873, Mrs. F. sent for Dr. Trenholme, at about nine o'clock, to attend Mrs. M., suddenly taken ill at her house. Mrs. M., a Canadian by birth, is about 40 years of age, stout and plethoric, about 5 feet 6 inches in height, and a little over eight months pregnant with her first child, having been married not a year.

Her history is uncertain, but from all that can be definitely known, she seemed, previous to the above date, to be laboring under some great mental anxiety, due, as she said, to domestic trouble, her husband having deserted her a short time after marriage, taking with him \$500 dollars, amount of all her savings. This, with the neglect of her family and friends, worried her, and caused at times great depression of spirits.

On the morning of the 25th November she rose at her customary hour, seemingly in better spirits than usual, and went down to the kitchen, where in a short time she suddenly complained of "a queer feeling" in her head, and feeling unwell. She was assisted to her room, and in a few minutes was "taken with a fit," and the doctor immediately summoned. On his arrival he found the patient comatose, face livid, breathing stertorous, pupils somewhat dilated—left pupil more than the right—and the limbs flaccid. Upon examination, per vaginam, found no evidence of uterine contraction; the os undilated and quite unyielding. Dr. T. stated that history of the woman indicated softening of the brain, and that the present condition was in all probability due to rupture of a blood-vessel, with effusion at base of the brain, but more extensive on the right than on the left side; also that the condition of the pupils led him to conclude that the right thalimi optici would be found specially implicated.

At half-past 10 a.m., I was sent with two other final students (Messrs. Rose & Shee) to watch the case. On our arrival we found the woman in a totally unconscious state, lying at length on her back, with head inclined to left side; surface cold, pale, clammy; nervous sensibility entirely gone, as by

pinching and tickling no corresponding movement was made; respiration 38 per minute; face slightly suffused and oedematous; patient evidently dying. Examination per vaginam showed the os uteri, as before stated, unchanged. Auscultation over uterus showed child still living.

At quarter to 12, Dr. Trenholme again called, and report made that no change had occurred from the time that we arrived, save that the patient was gradually sinking and very near her end. The child still showing signs of life, the doctor determined, as soon as life was extinct in the mother, to perform the cæsarian section, in order to save the child if possible, and immediately made preparations for the operation. At twenty minutes past 12 life was declared extinct; and in presence of nine or ten students of his class, the doctor made the section through the Linea Alba into the uterus, and delivery of child effected, but dead, all our efforts to reanimate proving unavailing. The walls of the uterus were unusually thick, being at least $\frac{3}{4}$ in.—the average thickness being only $\frac{1}{4}$ in.

Post-mortem, made three hours after death:

Thorax—Lungs healthy; heart surrounded by an unusual amount of fat; cavities empty, and the organs being firmly contracted, appeared smaller in size than natural. Abdomen—Liver presented a granular appearance, from commencing degeneration; gall bladder contained between fifty and sixty stones, some as large as a pea. The remaining abdominal organs apparently normal. Uterus presented the normal post-partum condition; the incision on its anterior surface, through which the child was extracted, being open, and exhibited the still retained placenta.

Cranium—On removing the calvaria, the membranes were found highly congested, small clots being observed beneath the arachnoid, between the convolutions at different points. On removing the brain, all the structures at the base were found completely imbedded in coagulated blood, which covered nearly the whole surface of the base of the brain. On section—Punctæ vasculosa very large. The lateral ventricles were distended by a large clot, which also filled the third and fourth ventricles. The distension was so great that in the lateral ventricles the parts were displaced, and the septum lucidum completely destroyed. The floor of the third ventricle was ruptured forming a communication with the base. The "iter e tertio ad quartum ventriculum" was distended to the size of the little finger. The valve of Vieussens was ruptured, and the fourth ventricle distorted. The right "Thalimi optici"

was completely broken up, having a large clot of blood in its interior; this clot was continuous with the clots in the ventricles. Careful examination was made of the vessels by the blow-pipe, but no lesions could be discovered in the arteries at the base of the brain; from this condition hemorrhage must have occurred in the thalimi optici, escaping into the ventricles, and through the ruptured floor of the third ventricle to the base. A large amount of blood had escaped, and although not measured it must have exceeded seven ounces. No disease of the vessels was noticed, and it was impossible to discover if there had been any softening in the thalimi optici, as it was so completely destroyed. No disease nor lesion was observed elsewhere.

Montreal, February, 1874.

A Case of Pleuro-Pneumonia-Paracentesis. By
JOHN CHANONHOUSE, M.D., Eganville, Ont.

Laurence Curley, *æt.* 20, of a strong habit of body, a smart and active young man, and one who has always enjoyed good health. On the evening of the 20th May, having walked from the village to his home, a distance of three miles, and the weather being very bad, he received a severe wetting, and neglected to change his clothes.

Towards the morning of the 27th he had a chill, which, however, soon passed off. Three days afterwards he suffered from a sharp pain in the left side, also back part of chest and in the shoulder; this was immediately followed by fever, hurried breathing, flushed cheeks, cough accompanied by a rusty, thickish expectoration. The prostration of strength was extreme. The pain was so severe that he had to remain as motionless as possible. The slightest movement made him cry out in agony. On the 28th, 29th and 30th the fever greatly increased; but having just broken my clinical thermometer, I was unable to take the temperature, but it could not have been less than 104 or 105 during the hour of my visits, about eleven o'clock each day. There was now delirium and perspiration, pulse quick and small, tongue covered with a yellowish fur, no appetite at all. It was with the greatest difficulty he could be persuaded to take nourishment. Urine scanty, and of a high colour, and containing abundance of chlorides. In auscultating large gurgling crepitation was heard. At the commencement of the case I put him on large doses of *Liq Ammonia acetatis*, with a little solution of morphia. A large poultice was also kept applied to his side. The inflammation progressing so rapidly to the last stage made me change

the treatment to one more stimulating. I gave him ammonia and bark, brandy and egg mixture; but notwithstanding this, there was no improvement, and the patient remained in a lingering condition till one night he had a severe tickling cough, which continued all night, and early in the morning vomitted a large quantity of pus and jelly-like substance, which adhered to the sides of the vessel. Shortly before the matter was vomitted, both feet were *œdematus*. After this the *œdema* gradually disappeared. Cough, with expectoration of pus, was now more frequent, particularly at night, and hectic symptoms showed themselves. Ten days from this date, a bulging was visible between the sixth and seventh ribs, six and a half inches from middle of sternum, posteriorly. This bulging increased, fluctuation became visible, and all the symptoms of pointing appeared. At this stage I thrust a large trocar into the most prominent part of the swelling, and by means of Mattison's No. 1 male tube, drew off three parts of a large basinful of pus. Immediately after this, the cough ceased. The following day I injected one part of carbolic acid to thirty of water, and much to my astonishment, a small portion of the injection came out by the mouth, and continued to do so for the three succeeding days, each time the injection was used. After the tapping, a drainage tube was put in and kept safely in its place by adhesive plaister and bandage.

The patient now began rapidly to improve, hectic symptoms disappeared, and appetite began to return. From this out, kept him on iodinated cod-liver oil, quinine, and as good a diet as could be procured in a newly settled country. The drainage tube was left in till the 21st August, that is, three weeks from date of tapping, and then removed. The wound healed kindly, and the patient on the 30th Sept. came himself to see me, and said he began to feel quite strong. He weighs now 128 pounds, while previous to his illness his weight was 147.

Eganville, Ont., January, 1874.

Correspondence.

To the Editor of the Medical Record.

SIR,—In the last number of the *Record*, please notice a short article on Post Partem Hemorrhage, treated by acetate of lead, as a *dernier resort* in the one case, and after having "*tried the usual treatment*" in the other; an expression not very definite.

Now, it requires, according to the writer's statement, a few minutes for the medicine to act; and

since, in such extreme cases as described, a few minutes are of such vital importance, requiring the most prompt and decisive action on the part of the practitioner, would you, Mr. Editor, advise the substitution of this treatment, viz.: three drachms of crystallized acetate of lead (180 grains) in preference to introducing one hand into the womb and turning out the clots and grasping it with the other, at the same time giving ergot; or should this treatment fail, would not the injection of diluted alcohol into the womb be preferable to waiting for 3 iii of the crystals to dissolve in the stomach before entering the circulation?

W. A. C.

Campden, Ont., Jan., 1874.

"Doctors differ," is an old and a true adage, and in the matter of treating post partem hemorrhage—perhaps at this moment they differ more than upon most other points, as the discussions which have lately taken place at the London Obstetrical Society proves. We have, of course, read the paper to which our correspondent refers, and, as he asks a candid question, we give him our opinion. Having used acetate of lead in a good many cases of menorrhagia, with almost negative results, we would not feel inclined to rely upon it, in post partem hemorrhage, where the delay of a very few minutes might prove fatal. We would introduce our hand into the uterus, and if ice were to be had, we would introduce it into the womb and give ergot. We have seen the very best results, from the most alarming hemorrhage, from a piece of ice inserted into the womb. If within a reasonable time these means failed, we would not hesitate for a moment to inject into the cavity of the womb, a solution of the perchloride of iron, with glycerine of the strength of one to ten. The two cases reported by Dr. Channonhouse, were very instructive ones, and illustrated in a remarkable degree the development of an effect from large doses of acetate of lead, which, according to several authorities, it is said to possess. Practitioners in many districts have often to work with limited tools at command, and we confess we are often amazed at the satisfactory results which ensues. In this, we must say, it redounds to the credit of our Canadian medical men.

Progress of Medical Science.

THE TREATMENT OF BILIARY COLIC.

Dr. W. Pichler, physician to the Carlsbad watering place, makes the following communication to the

Allegeme Wiener Medizinische Zeitung, Nov. 18, '73.

Gall stones are daily occurrences to the busy practitioner in Carlsbad. It is not remarkable therefore that the Carlsbad physicians possess a rich experience in this field. In every session of the Carlsbad Verein für Natur und Heilkunde are reported cases of cholelithiasis which are of the highest clinical importance. In the last session were abundantly exhibited specimens of the size of a chestnut, which had been discharged, of course, not by natural passages, but abnormally in consequence of chronic inflammatory adhesion of the gall bladder to the intestine, ulceration, perforation and escape of the voluminous concretions. If those cases are remarkable for size, others are equally remarkable for number. In one case some 30 stones of the size of a pea escaped in one act of defecation. In another especially remarkable case nearly 300 stones from the size of a barley corn to a pea escaped. I could cite a whole series of cases of biliary colic of real clinical interest from their long duration, their intensity, their complicated course or their implication of the nervous centres. I withheld a communication upon these cases as well as a discussion of the mechanism of the incarceration of biliary concretions for another occasion to mention in few words, upon this occasion, the treatment.

The pain of biliary colic, as is well known, is extremely severe, and women often declare that they are worse than labor pains. The painfulness of the disease, the reflex manifestations associate, vomiting, chills, epileptiform and other convulsions, etc., call for narcotics in the chief role along with heat in the form of cataplasms and baths. Opiates, morphia internally and hypodermically, chloral are used alternately.

In the selection of narcotics, the physician has, of course, a wide field, and he can never be at loss to relieve pain. In my experience, derived from treatment of a great number of cases of extreme severity, I have convinced myself by repeated experiment that the best result is obtained by the use of chloral hydrat preceded by a dose of morphia, internally or hypodermically.

Very frequently the pains are so intense as not to be allayed by morphia internally or even hypodermically. Large doses are dangerous. If in such cases the morphia be followed by chloral, surprising relief is obtained and also permanent relief without subsequent danger of hypnosis. This occurs, as is easily demonstrable in any case, when either of these agents alone is insufficient.

After I had made this discovery I found in various French and German papers a record of analogous results as attained after attention had been directed to this combination by physiological experimentation, Nussbaum, for instance, observed that a patient, who had accidentally received a subcutaneous dose of acetate of morphia before an operation and was chloroformed just previous thereto, did not awake as usual after the narcosis, but slept on twelve full hours, and remained insensible to every kind of pain during all this period.

Claude Bernard long ago observed that chloroform narcosis continues a long time in animals who previously received a dose of opium. Goujon and Labbé have had repeated opportunity of making similar experiments, and they published the interesting fact that the combination of small doses of morphia and chloroform secured a complete insensibility for several hours without sleep. Another French observer, Rabuteau of Paris, performed the following experiment. He gave a dog 5 ctg. narcein, and then subjected him to chloroform narcosis. On awakening, the animal was totally devoid of sensation. He went about the room, recognised the voice of his master, but was void of any trace of sensation. He was stuck, pinched, his feet trodden on, but he expressed not the least manifestation of pain. This condition lasted many hours. It was only on the next day that sensation returned.

The union of morphia and chloral thus is of the the greatest benefit in practice, and we call especial attention to its efficacy in the treatment of biliary and renal colic and the various neuralgias.

OBSERVATIONS ON THE CAUSES AND TREATMENT OF CERTAIN FORMS OF SLEEPLESSNESS BY DYCE DUCKWORTH, M.D., F.R.C.P.

ASSISTANT PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL, AND
DEMONSTRATOR OF SKIN-DISEASES.

In this communication I am desirous to direct attention to some causes of sleeplessness, which, I think, are hardly sufficiently recognised or adequately met by the resources of practical medicine. The remarks I have to make have reference more especially to causes of insomnia acting in persons who are either in apparently good health, or who, at any rate, are not decidedly ill. Some of the conditions which I shall mention as leading to loss of sleep will, however, be shown to occur in persons who cannot be said to be in good health. Systematic writers on the practice of physic only incidentally allude to the subject of insomnia and more especially when they treat of certain cerebral affections, of delirium tremens, early phases of insanity, and stages of acute inflammations and fevers.

There are naturally idiosyncracies with regard to sleep; but I have nothing to say about these, further than they must be so far considered in every case of insomnia that comes under observation. It should be remembered that many persons, apparently healthy, declare that they have hardly slept during a night, and believe what they aver, when they have really only lost two or three hours of a long night's rest; not that such a loss is unimportant by any means. So-called bad nights exert a very harmful influence upon the sufferers; and much subsequent bodily and mental enervation, much nervous irritability, and, even, I believe, misdirected appetite, are due to this partial loss of rest.

Much light has been thrown upon the physiology of sleep during the last fifteen years; and the teaching of those who have best investigated the subject requires us to believe that the cerebral condition is

essentially one accompanied by a feebler and diminished circulation of blood in its vascular system. It is also within the reach of capable observers to assure themselves that the most constant (physiological) cause, and certainly the most frequent accompaniment, of sleeplessness is an opposite condition, or one of active and increased circulation of blood in the brain. These views are the reverse of those that were formerly taught upon the subject. The statement that Boerhaave, published in 1708 (*Institutiones Med.*), "Motus arteriarum, venarumque et cordis, fit fortior, lentior, æquabilior, plenior, idque per gradus diversos augendo, prout augetur somnus;" and again—"In somno augetur motus cordis," were corrected, as were also many doctrines of the same illustrious physician, by the acumen of Cullen, who taught that "an increased impetus of the blood in the vessels of the brain was the principal cause whereby the waking state of it was supported" (*Institutiones of Medicine*, 1770.) The more recent researches of Durham and Hammond have clearly shown that the brain is in a comparatively anæmic condition during sleep, and that the blood thus removed from the head is more freely supplied to the viscera and integuments. We have in this latter statement an explanation of the commonly observed fact, that perspiration is present in inordinate amount during sleep as compared with the state of wakefulness.

I believe that one of the most common causes of sleeplessness in persons otherwise not in bad health, is dyspepsia in some of its forms; and, although most observers would be prepared to agree to this view, I think the subject has not received sufficient attention. As Sir Henry Holland has remarked (*Medical Notes and Reflections*, page 218), "no rules are more important than such as apply to the relation between digestion and sleep," and he proceeds to show that all such rules are exceedingly scanty and incomplete, "notwithstanding the perpetual experiment which life affords upon the subject." I aver then, that dyspepsia is not only one of the commonest, but also one of the least recognised of the causes of the loss of sleep; and amongst reasons for this statement are the facts that the symptoms of digestive disturbance are sometimes, indeed frequently, not appreciable, or not at all prominent, at the time of retiring to rest: and also, that the diurnal digestion may be in a comparatively vigorous state. Most persons are familiar with acute dyspepsia as occurring in the night, and supervening upon errors of diet: and in such cases a disturbed sleep is rudely broken by an attack of cardialgia or acid vomiting. The dyspeptic symptoms to which I specially allude as interfering with sleep, are less severe than those just enumerated. The patient retires to rest and sleeps; it may be calmly, for a short period, but he then awakes, and forthwith secures no more sleep for several hours. To such a form of dyspepsia Cullen alludes, and he was the victim of it himself. He writes, "Persons who labour under a weakness of the stomach, as I have done for a great number of years past, know that certain foods, without their being conscious of it, prevent their sleeping. So I

have been awaked a hundred times at two o'clock in the morning, when I did not feel any particular impression; but I knew that I had been awakened by an irregular operation in that organ, and I have then recollected what I took at dinner, which was the cause of it. Dr. Haller is liable to the same complaint; and, in his larger work especially, he gives the particulars of his own case, and to the same purpose that I have done, as he learned it from his own experience.* So far as I know, nocturnal dyspepsia of this character is not described in treatises on digestive disorders. The sources of it, however, may, I believe, be various. There may be no actual suffering experienced, and, beyond dryness of mouth, burning soles of the feet, and heat and throbbing in the head, there is little to complain of.* The symptoms may supervene several hours after the last meal, but they never occur unless some error of diet have been committed; and it may not always be possible, as in Cullen's own case, to attach blame to the particular article of food, or to the unwholesome combination of aliments which has led to the result. And naturally, the question of idiosyncrasy must be considered in all such cases.

It seems most probable that the symptoms are due to a too acid condition of the contents of the stomach and upper part of the small intestine, and it is certain that excess in fatty and highly seasoned food, in fruit, and in wines of various kinds, is the chief exciting cause of the dyspepsia. Hence there is no more fertile source of this trouble than the fashionable dinner-party, especially if their be indulgence in the sweet courses and in fruit, and if the fatal dietetic error, peculiar to Englishmen, of mixing various wines be committed. The misery of insomnia is rendered more certain subsequently, if both strong coffee and strong tea be taken after such a dinner, as is not unfrequently the case. The dyspepsia is thus aggravated by special cerebral excitants.

The form of indigestion known as "dyspepsie deliquides," described by Chomel (*Des Dyspepsies* Paris, 1857, p. 99), and by Dr. Thorowgood in this country, may also prove excitative of sleeplessness. But this affection, together with such symptoms as I have just described, are best referred clinically to the type of atonic dyspepsia, and, when the immediate discomforts are relieved, a more prolonged therapeutic course is needed to promote recovery.

It is needless for me to do more than allude to the almost intolerable insomnia, delirium it may be called, induced by excess of tea or of coffee taken late in the evening. All persons are not affected by these, and some people can even sleep soundly after taking one or other, provided they retire to rest immediately, and do not begin to do brainwork. It is less well-known, however, that smoking strong tobacco late at night is a source of sleeplessness to some people, and if practised after dietetic errors only tends to aggravate the subsequent wakefulness.

I pass on now to speak of sleeplessness due to overexhaustion, both bodily and mental. It is well

known, and within the experience of most persons, that a certain point of fatigue may be reached when sleep is impossible. This condition is the result of increased flow of blood to the brain, consequent on vaso-motor paresis. After a day of incessant activity, when body and mind have been unduly taxed, this state may be reached. If, in addition, there be anxiety of mind or a persistent source of worry, the insomnia is aggravated. To "take off one's cares with one's clothe's" as has been said, is indeed an excellent rule, but one, at times, very difficult of accomplishment.

Literary men suffer from insomnia oftentimes as the result of brainwork, executed at the small hours of morning, and sometimes because of bodily exhaustion superadded from sheer want of nourishment. Brain-work, in addition to the tax upon the ordinary powers by the pursuit of a profession, is, I believe, highly exhausting to the majority of those who practise it, especially amidst the calls, turmoil, and high pressure of life in a metropolis. The state of bodily fatigue to which I allude, is sometimes experienced by travellers who, after a hard day of locomotion, with perhaps irregular, and not very nourishing meals, endeavour to procure a night's rest without taking a sufficient or suitable meal in the first instance. And it is precisely at this meal that the grossest dietetic mistakes may be committed. The digestive powers are at a minimum, and yet there is a large demand for nutrition. The difficulty is not always to be met, but attention to the rules of physiology will in most instances, I believe, secure the wished-for result for stomach and brain. And so, for the throbbing head and busy brain of the literary man or student, there are rules to follow, of which I shall speak presently.

The treatment of cases of insomnia due to nocturnal dyspepsia is to be met by remedies affording relief temporarily, and by measures calculated to improve the digestion generally. Naturally, if due discretion were exercised at the last meal taken, no disturbance would occur, but I have already shown that it is not always possible to discover the offending article or articles of diet. A large meal taken late after exhaustive work, and when solid food has not been eaten in the middle of the day, is liable to be digested with difficulty. Hence long intervals between meals should be avoided. There is no harm in varied diet at a late repast, provided too much be not taken, and the food be skilfully cooked. As adults are the sufferers from this complaint, so in most cases have they the requisite knowledge of the particular articles of food that best agree with them.*

* In the case of a nourishing meal being required late at night, after a hard day's travel, I know nothing more suitable than good beef-tea, if it can be had; and, by the aid of prepared extracts of meat, this is now quite within the reach of travellers in the most outlandish quarters. Chicken, and simply prepared salad of lettuce, is likewise easily digestible late at night, by even delicate and exhausted persons. Good draught beer is advisable, if it agree generally, or dry champagne; the latter, indeed, is often an excellent remedy. In cold weather, mulled claret is very valuable; and something is perhaps due to the nutmeg in its composition, for this spice, as Cullen showed, is, in full doses, an important hypnotic. (*Materia Medica*, vol ii, p. 204.) Lettuce has likewise similar properties.

* The cerebral circulation is this, as in most forms of insomania, increased in activity.

The question as to stimulants, however, is less readily answered. No one can doubt that much of the dyspepsia of the affluent classes in this country is due to indiscreet mixing of liquors, a practice which is singularly in discord with the science and skill now imported into culinary matters.

It is at all events sufficiently well-known that to drink one wine is most wholesome for dyspeptics; and whether it shall be claret, dry sherry, or alcohol in some form, properly diluted, must be decided in each case. In some instances of acid dyspepsia, port wine is of use, and appears to call forth less acid than sherry, perhaps, as Dr. Budd has suggested on account of its stringency. For the immediate relief of the insomnia and dyspepsia, full doses of alkalies should be given. The calcined magnesia or solution of carbonate of magnesia in excess of carbonic acid, and the compound rhubarb or Gregory's powder, are amongst the best remedies. A large draught of cold water will also prove effectual at times. The success of the therapeutical measures throws light upon the existing cause of the sleeplessness, even when this is hardly suspected. Cullen does not state what remedies he employed in his own case, but we may rest assured that he treated himself.

The dyspepsia of liquids, as a cause of insomnia, is naturally best treated by the adoption of a diet in which less fluid is taken. The underlying atonic condition of the stomach and intestines requires the remedies proper to such a state; and here may be mentioned, as of especial value, the mineral acids, strychnia, and quinine.

For the sleeplessness ensuing upon tea or coffee taken late at night, there is hardly any remedy that I know. To give alcohol in any form, with a view to induce sleep, after an excess of tea, is of no use. I believe it is better to read an easy and not too entertaining book when in this condition, for sleep is thus more quickly induced than when the sufferer lies conscious of each cardiac and vascular pulsation, and agonised by floods of rushing thoughts.

For the relief of the insomnia following exhaustion, either mental or bodily, there is happily a good deal to be done. No greater mistake can be made than to retire to sleep at the time of completed digestion.

It is almost proverbially known to be bad to go to bed fasting. Insomnia, from this cause, is, of course, easily met by taking some simple food. People, whose duties occupy them far into the night, and who have exercised their minds with any effort, should take a full evening meal, or, failing this, nourishment must be had later on. And where there is, from any cause, undue pressure of work, mental strain, or anxious watching, I know no nutriment so suitable as well-made beef-tea or extract of meat. The latter is of especial value, being always on hand and, if taken in the form of Mr. Darby's extract, the best, I believe, of all such preparations, and spread upon bread or biscuits, is eminently calculated to relieve the craving felt, and to supply a readily digestible little meal. Such measures, I think, are more to be commended than was the

practice of literary men fifty years ago, which consisted in the imbibition of whiskey punch, made with infusion of green tea.

I should recommend all bad sleepers who cannot trace their insomnia to indigestion, and who may have passed an unduly long interval since their last meal, to employ extract of meat in the manner I have just described. I can, at all events, bear testimony to its value from personal experience, and I have known benefit to be largely derived from its use in several other instances.

The sleeplessness due to cold feet in winter time, resulting from alterations of arterial blood-pressure in the body, is best met by the use of pediluvia at bedtime; and the addition of mustard or tincture of iodine is valuable, especially where the sufferer is a victim to chilblains.

Experience shows that a prolonged nap after a late dinner interferes with proper sleep at the usual time. I believe that a short sleep of a few minutes ("forty winks") is really valuable after dinner to those who have to work late at night. If the sleep be of an hour's duration, digestion is disturbed, and, in some cases, nightmare occurs immediately on going to bed.

Sleeplessness may sometimes be the result of mere bad habit. There may be no error of diet as the cause, and no dyspepsia; but there is simply a morbid apprehension as the head is laid upon the pillow that sleep is impossible, and forthwith the brain begins to be busy. This state is most apt to supervene upon a long course of broken rest. Persons who have kept watch by the sick, especially where there has been mental anxiety or distress, suffer from this form of insomnia. The acuteness of their trouble has more or less passed away, but night brings dispeace and apprehension with it. This form is engendered, then, as a bad habit from an interruption, more or less prolonged, of one of the periodical functions of the brain. It is not possible to detach entirely, in these cases, the peculiar mental element—the active conjuring up of past scenes, or the busy memory; but, in other instances, no cause is readily to be found, and we are compelled to believe that the bad habit results from a low condition of nervous energy.

The benefit to be derived in this form of insomnia from change of scene and change of air is very remarkable, and it is, indeed, seldom advisable to employ medication. There can be no doubt of the value of the change of air in many forms of sleeplessness; but, in awarding the true therapeutic value to climatic influence, we must not altogether lose sight of the effects of the *medicina mentis*. To pass from the noise and sullen heat of dwellings bordering upon the streets of London on a summer night, to a cool and well aired apartment, in any peaceful country district, is in itself a strong incentive to slumber; but, beyond this, there are special aerial conditions and influences due to proximity of sea,*

* Townspeople resorting to the seaside very commonly experience marked sleepiness during the earlier part of their stay; and the same is sometimes the case in the pure air of the country. Long continued exposure to air, as Dr. Hand-

nature of soil, and immediate surroundings, which unquestionably require due consideration in each case. Indeed, attention to such points is almost as necessary, in some instances of sleeplessness, as it is in the cases of sufferers from spasmodic asthma.

The best drug to employ in such cases, if they must be employed, are the bromide of potassium or chloral hydrate. Henbane, in full doses, is also of service.

Persistent odours will prevent sleep. Thus flowers in a sleeping apartment,—where, by the way, they never should be placed—giving off aroma, will affect certain people powerfully, causing headache and cerebral irritability (*vide* Moore on *Going to Sleep*, page 37. London, 1868). I have known the effluvia of certain embrocations to act in preventing sleep for a time in some patients; belladonna, tar, and citronella, in particular, are to be blamed.

While laying stress upon securing pure air for sleeping apartments, as far as possible, attention must also be paid to the amount of moisture present in the air. In many instances, the air is deficient in moisture, and the dry air inspired, often laden with dust, is a source of discomfort to the nasal and bronchial membranes; not only so, the influence of a too dry atmosphere is perceived by the whole cutaneous surface, and thus a source of irritation exists which is not unfrequently the last to be suspected.

In the case of bedridden persons, or during long illness, this point is to be attended to, and the absence of moisture is to be met by keeping water in the room, and, if need be by sprinkling water on the floor. I am sure that many persons have additional cause for their sleeplessness in the dry air they inspire in the bedrooms of hotels, after doing a hot season on the continent of Europe. They are committed, perhaps late at night, to a room that has been shut up and baked by a fierce sun all day, and that has not had an ounce of water in it for days. To open the windows may entail a plague of mosquitos, or give entrance to a still more deadly malaria. In such a case, I recommend a very free distribution of water to various parts of the floor. I have known quarts of water to evaporate in a single night when used in this manner, showing the urgent necessity for the employment of it.* The same condition of dryness is met with in winter in all apartments warmed by artificial heat. This is not felt where there are open fireplaces; but if stoves be employed, then all the unfavorable conditions for insomnia are present, unless the amount of heat and moisture be duly regulated. According to Dr. Cornelius Fox, air, containing a healthful amount of moisture, exhibits a difference of about five degrees

field Jones has remarked, is a powerful inducer of sleep; but it is to be observed that the air must be pure, and, if possible, of bracing character. Long continued exposure to the air and ochlotic miasms of large towns is by no means so effectual an hypnotic.

* It is highly probable that ozone is generated by such a procedure as I recommend. Dr. Cornelius Fox's observation on the "Purification of Air by the Vaporisation of Water", in his book on *Ozone and Aniozone*, and his paper on "Coke as a Fuel in relation to Hygiene", should be read by all interested in sanitary matters.

between the wet and dry bulbs of a hygrometer. If the difference be greater, moisture should be added.

As to the best posture to assume on going to sleep, I think little need be said. Dr. Radcliffe has lately recommended natural decubitus to ensure sleep, but, lest this seem paradoxical, it should be added, that this advice is for bedridden persons, the subjects of chronic nervous disorders, and the plan suggested is in opposition to a sitting posture to be maintained during the day by a suitable bed support. In the case of otherwise healthy people who suffer from heat and throbbing in the head as part of their insomnia, a posture with the head somewhat high is desirable in order to promote sleep upon physiological principles. A hard pillow should also be employed in such cases.

In conclusion I should remark that the best knowledge we now possess, as to the action of the drugs commonly used to secure sleep, shows us that both bromide of potassium and chloral hydrate cause diminished amount of blood to circulate through the brain; and hence, as in many similar cases, the advance of the science of therapeutics has shed light upon the mysteries of pathology.—*British Medical Journal*.

POST-PARTUM HEMORRHAGE.

In the *British Medical Journal* for January 11, 1873, Dr. Robert Barnes says: "In discussing the action of powerful styptic injections in arresting flooding after labor, the conditions under which the practice I have recommended is indicated have not always been accurately appreciated. The great agent, of course, in stopping hemorrhage, is the constriction of the uterine vessels by the muscular wall in which these vessels run. All the ordinary means of arresting hemorrhage are aimed at producing muscular contraction. But muscular contraction depends on nervous power. Thus cold, grasping the uterus, introducing the hand, galvanism, all depend for their efficacy upon the spinal cord being able to respond to the peripheral call. When, therefore, these means prove sufficient, the inference is generally warranted that the case, although serious, is not desperate. The condition is very different when the excitomotor function is suspended; when neither by peripheral excitation, nor by centric stimulus, the nerve-force can be drawn or sent from the spinal cord to the uterus in sufficient intensity to cause contraction. At this point, unless the bleeding is arrested by syncope, or by temporary enfeeblement of the circulation, the patient is in most imminent danger of death. The slightest shock or disturbance will extinguish the flickering spark of life. Under such circumstances I have known death to follow, to all appearance immediately caused, by the injection of cold water or passing the hand into the uterus. If instead of cold water we inject a solution of perchloride of iron, the same catastrophe may ensue. Is it more likely to ensue? Very careful observations are required before this question can be answered in the affirmative. People are apt to think that cold water is so simple a thing

that it cannot do any harm. But if it cannot do any harm, is it not probable that it is, under the conditions discussed, equally powerless to do any good? Harmless remedies, as a rule, fail in great emergencies. Now, cold water fails not because it is harmless, for the shock and depression which it causes are extremely dangerous; but it fails because nervous power being exhausted, it cannot excite uterine contraction, and it has no other virtue in arresting hemorrhage.

"Here, then, it is that styptics come to the rescue. The emergency is extreme, and would be desperate, but for the new power invoked. If blood be still running, it is instantly seized at the mouths of the vessels, which become sealed by coagula. It also constricts the inner surface of the uterus, and thus further closes the vessels. The system then has time and opportunity to rally, and by and by the contractile power returns. In estimating the relative value, then, of cold water and perchloride of iron, we must reflect that iron acts and saves life when water is inert or injurious. If occasionally death follows, and is apparently accelerated by the iron injection, we have, on the other hand, to remember that it was used as a last resource, when the patient was likely to die even if nothing were done, and that even under these unpromising conditions *many lives, to all appearance doomed, have been saved.*

"The great lesson to learn is to take courage to use the styptic in time, that is, before the vital power has sunk too low. It was not to be expected that a remedy powerful enough to save under the last extremity should be altogether free from danger. But I have seen so many women bleed to death, and have seen so many saved by the timely use of the iron injection, that I am much more afraid of the bleeding than of the remedy.

"In some cases there is reason to believe that the iron enters the uterine vessels. I have known intense pain in the uterus follow immediately on the injection. How is this explained? If blood were present in the vessels it is a chemical necessity that contact with the iron should cause coagulation. I infer, then, that in some cases the vessels are for a time nearly empty, and that there is a certain amount of suction-action induced by the relaxed state of the uterus and by the lateral or semi-prone position of the patient. I would therefore urge that the patient be placed on her back, and that the uterus be grasped firmly between the two hands of an assistant during the injection.

"In some cases it is easy to carry a swab of sponge soaked in the iron solution into the uterus. In this way probably some of the risk attaching to injection is avoided. The persulphate of iron, which is preferred by our American brethren, may have its advantages. Its styptic force is probably greater. It may be used in the form of one part of the liquor ferri persulphatis of the *British Pharmacopœia* to six or eight of water. The proper strength of the perchloride solution is one in ten."

In the *Obstetrical Journal of Great Britain and Ireland* for May, 1873, Dr. W. S. Playfair says: "The discussion on the treatment of post-partum

hemorrhage by the injection of a solution of perchloride of iron, which recently took place at the Obstetrical Society, has probably been studied by all who are interested in obstetrics.

"It was the first occasion on which the merits and demerits of this most important improvement in midwifery had been formally brought under its consideration, and it is to be regretted that the value of the debate was somewhat marred by exaggerated statements and undue warmth of argument. It is certain that so active a method of treatment should be carefully studied. Like every other active treatment it is advisable that its indications and contraindications should be thoroughly investigated by the light of experience; and there can be no doubt that we have still a good deal to learn about it. In common with many other speakers on that occasion, I stated that I had frequently injected the perchloride and had never seen any ill effects follow its use. At the same time I was willing to admit, as I do not doubt that Dr. Barnes and all others who use it would willingly do, that an agent so potent should not be carelessly and indiscriminately used, and that certain inconveniences or even risks, not yet fully made out, might attend its employment.

"By a somewhat curious coincidence a few days after the debate I had a case under my care in which I used it, and, as I firmly believe, saved by it the life of my patient. Yet very grave and even alarming symptoms followed—due, it can be hardly doubted, to its employment; and I think that the case is sufficiently instructive to be worthy of record. It shows one class of dangers which may arise from it, and possibly the history will teach us how, under similar circumstances, these are to be avoided.

"Two and a half years ago I saw, with Mr. Aikin, of Clifton Place, Sussex Square, a lady who was apparently at the point of death from post-partum hemorrhage. She had been confined of her fifth child rather more than two hours before I saw her, after a somewhat tedious labor, the breech presenting. All her other labors had been natural. She was a stout woman, thirty years of age. After delivery the uterus had contracted firmly, with no more discharge than usual. Mr. Aikin had stayed with her more than an hour, and had left her seemingly well and comfortable. Half an hour afterwards she had a tremendous gush of hemorrhage. Mr. Aikin was immediately summoned, and speedily arrived, accompanied by Mr. Rushforth, of Oxford Terrace. The patient was then collapsed and insensible, and to all appearance dead. Some brandy was introduced into the mouth through an aperture formed by the absence of one or two teeth, and a solution of perchloride of iron, which Mr. Aikin fortunately had with him, was at once injected into the uterus, and all further loss was checked. When I saw her shortly afterwards she was still collapsed and pulseless, and I immediately sent for the necessary apparatus for transfusion, which seemed to afford the only hope of saving her life. Before the instruments arrived, however, she had rallied; and eventually made a good recovery, though she long remained blanched and anæmic. Such was the for-

midable history of the patient previous to her present confinement.

"On this occasion Mr. Aikin was unable to take charge of her, being confined to his home by illness, and I was asked to attend her in company with Mr. Rushforth. In no case is 'forewarned, forearmed' a truer proverb than in relation to post-partum hemorrhage, and as we adopted every possible precaution to prevent it, we were in hopes that no repetition of the former flooding would occur. The head presented, and the labor was natural and easy. As the head descended a drachm of the liquid extract of ergot was administered. Firm pressure on the uterus was kept up as the child was expelled, and continued without intermission afterwards. A second dose of ergot was given shortly after delivery, immediately after the expulsion of the placenta. One or the other of us kept kneading the uterus for three-quarters of an hour after the birth of the child. It contracted fairly, but not tightly, and showed a tendency to relax. Two or three times small pieces of ice were introduced into the uterus to promote contraction. All this time there was no unusual loss, and we considered any danger of hemorrhage to be over. Suddenly, and while the uterus was still grasped by the hand, an appalling flow of blood occurred. I immediately emptied the vagina of a mass of clots, and, as all means of promoting contraction had been already vigorously employed, I at once proceeded to inject a solution of the perchloride of iron of the usual strength; and not a moment too soon, as the patient was already tossing about, sighing deeply, and showing the well-known formidable signs of collapse. As I injected I felt the uterus contracting around my hand, and not a drop more of blood was lost. Nothing could be more rapid and satisfactory than the action of the remedy, and I honestly believe nothing else would have checked the flooding or enabled us to save the patient's life. For two days all went well. On the third day the pulse was 100, and the temperature 102°. The day following the pulse was 120, small and thready, the temperature 104° in the morning, and 105° in the evening, the tongue dry and black, and the general condition very alarming. There was no abdominal tenderness whatever. The uterus was somewhat large, reaching nearly to the level of the umbilicus. There was little or no discharge, and what there was was highly offensive. Eight ounces of brandy per diem were administered, and 30 minims of turpentine every sixth hour, and a teaspoonful of Brande's beef jelly every hour. On internal examination the whole vagina was found to be filled with small, hard, black clots, formed by the corrugating effects of the iron, and believing that the symptoms were probably due to the retention in utero, and decomposition of similar clots, giving rise to septic absorption, the cavity of the uterus was freely washed out with Condy's fluid and water by which several portions of broken-down coagula were removed. Next day things were worse rather than better, the temperature being 105½, pulse 130. There was some cough with sibilant rales over the right chest. Still there was no local tenderness or

other symptoms. We then had the advantage of meeting Sir William Jenner in consultation. The general treatment was continued, the quantity of brandy being increased. With the view of reducing the hyperpyrexia, gr. v. of sulphate of quinine in pill were administered every third hour. The intra-uterine injections of Condy were continued three times a day, and in the evening a large and highly offensive clot was ejected. Next morning the temperature had sunk to 102½, and the pulse to 100. Treatment as before. Quinine was now given every fifth hour. In the evening the temperature had again risen to 104°. Another large coagulum was expelled after injection. Next morning the temperature had fallen to 101½, the pulse to 86, and all fetor had disappeared from the discharge. No more coagula were passed. It is needless to continue a record of the case, as the improvement from this date continued to be steady, and in a few days the patient was convalescent.

"There can, I think, be little doubt as to the sequence of events which gave rise to these alarming symptoms. When the iron was injected, although the hand was in the uterus, and the clots within it had been as much as possible removed, blood was still pouring out abundantly. The powerful astringent at once corrugated all the blood and coagula it came in contact with, and these hardened clots filled up the uterus and the canal of the vagina. In due course these began to decompose, and septic absorption took place. By the finger and the intra-uterine injection they were gradually broken down and removed. The improvement unquestionably dated from the expulsion of the two large and decomposing coagula on the sixth and seventh days after delivery. Immediately after this happened the temperature and pulse fell remarkably, and recovery commenced and continued uninterruptedly.

"What, then, is the lesson to be learned from this case? Is it that the risk is too great, and that the injection of the perchloride of iron should be banished from practice? I think most unquestionably not. I have little doubt, knowing what I did of the patient's former labor, and having already tried in vain all the anti-hemorrhagic treatment at our command, that without the perchloride the flooding would have proved fatal. It is indeed precisely in these inveterate cases, where every means of inducing uterine contraction proves unavailing, that it forms so invaluable a resource. Rather, I think, it should teach us to limit its use to these only—as, I believe, Dr. Barnes has all along taught. It shows, also, that the retention in utero of hardened coagula, liable to decomposition, may prove a source of danger hitherto unsuspected. With a knowledge of this fact it would be our duty to secure the expulsion of the coagula as soon as possible after all risk of hemorrhage had ceased, and make sure that there was a free exit for the discharge. This would best be done by satisfying ourselves on the second or third day after delivery that the vagina is not filled with clots, and removing them if present, and by using antiseptic intra-uterine injections freely, as in the above case, should suspicious symptoms arise. With a know-

ledge of this source of danger, it might probably be avoided in most cases. Whether any other astringent fluid, such as the tincture of matico, the use of which was suggested at the Obstetrical Society, would answer equally well in constringing the vessels from which the blood flows, and be less apt to produce hardened coagula, is well worthy of consideration. I question very much, however, if anything less than the most powerful and direct astringent is to be depended on.

"Important as are the lessons this case has taught me, it has left me not a whit less a believer, but rather a firmer one, in this most invaluable remedy."

TREATMENT OF CEREBRO-SPINAL FEVER.

By J. LEWIS SMITH, M.D., Consulting Physician to New York Infant Asylum, etc.

(*American Journal of the Medical Sciences*, October, 1873.)

At the termination of an exhaustive paper on cerebro-spinal fever, Dr. Smith, in speaking of the treatment, says: "Although we do not fully understand the conditions in which cerebro-spinal fever originates, it is certain, from facts observed in epidemics, that we are able to do something to diminish its severity and prevalence, and to protect the community. Measures to this end must be of a twofold character—namely, such, in the first place, as are calculated to improve the surroundings of the individual, so as to conduce to a better state of health; and, secondly, the regulation of his mode of life. Cleanliness and dryness of streets and domiciles, perfect drainage and sewerage, prompt removal of all refuse matter, avoidance of overcrowding, so as to procure the utmost salubrity in the atmosphere, the use of plain and wholesome food—in a word, the strict observance of sanitary requirements in all the surroundings—cannot fail to reduce the number and diminish the severity of cases; for this disease assumes its worst form and numbers the most victims where anti-hygienic conditions most abound. Of scarcely less importance is a strict surveillance of the mode of life, especially of children and young people, during the time of an epidemic. We have seen that this disease not unfrequently follows irregularities in the mode of life, excesses of whatever kind, and fatigue, mental or bodily. These should therefore be avoided. A quiet mode of life and moderate exercise, plain and wholesome and regular meals, and the full amount of sleep afford some, but not complete, security in the midst of an epidemic.

"*Curative.*—It will aid in determining the proper mode of treatment to bear in mind the anatomical characters as ascertained by post-mortem examinations. As the chief danger in the first days is from the intense inflammatory congestion of the cerebro-spinal axis, the prompt employment of measures calculated to relieve this is of the utmost importance. To this end bladders or bags of ice should be immediately applied over the head and nucha, and constantly retained there during the first week. Bran mixed with pounded ice produces a more uniform coldness, and is more comfortable to

the patient, than ice alone. Cold produces a prompt and powerful effect in diminishing the turgescence of the cerebral and meningeal vessels. A hot mustard foot-bath or general warm bath with mustard, should also be employed as early as possible, since it acts so powerfully as a derivative from the hyperæmic nerve centres, tends to calm the nervous excitement and prevent convulsions. An enema to open the bowels is also proper.

"Should bloodletting be employed, especially in the more sthenic cases? Even in the commencement of the present century, when it was customary to bleed generally or locally in the treatment of inflammatory and febrile diseases, a majority of the American practitioners whose writings are extant discountenanced the use of such measures in the treatment of this disease. Drs. Strong, Foot, and Miner, though under the influence of the Broussaisian doctrine, were good observers, and they soon abandoned the use of the lancet and leeches in the treatment of these patients for more sustaining measures. Strong, who published a paper on spotted fever in the *Medical and Philosophical Register*, in 1811, states that certain physicians employed venesection as a means of relieving the internal congestions, but finding that the pulse became more frequent after a moderate loss of blood, they soon laid aside the lancet. Some experienced physicians of that period, however, continued to recommend and practice depletion, general as well as local, as, for example, Dr. Gallop, who treated many cases in Vermont in the epidemic of 1811.

"No physician at the present time recommends venesection, but some of the best authorities, as Sanderson and Niemeyer, approve of local bleeding in certain cases. It may be stated as a safe rule that leeches or other modes of local depletion should not be prescribed in a large majority of cases, and if prescribed in any case it should be on the first day, for on the first day the maximum of inflammatory congestion is attained, and in no case should more than a very moderate quantity of blood be abstracted. Blood should only, in my opinion, be abstracted, and in small quantity, from the temples or behind the ears, in the more sthenic cases, in which, after the prompt employment of the other measures recommended, the stupor becomes more and more profound, and the patient appears already in incipient coma. But in allowing a moderate depletion it must not be forgotten that the disease is in its nature asthenic, and in its subsequent course will require sustaining measures. It is apparent, however, that the abstraction of blood if once allowed is likely to be recommended too frequently in the treatment of this disease by those who have had but little experience with it, for the state of most patients in the commencement seems so critical, and the stupor so great, that the most energetic measures seem to be required. But if the blood of patients is spared, and they are promptly and properly treated otherwise, it is surprising to see how many emerge from the stupor and finally recover. For example, in a case related to me by Dr. Griswold, the patient seemed to be comatose for three days, being apparently unconscious and the

pupils scarcely responding to light, but he recovered without losing blood. In only one case have I recommended the abstraction of blood, and this was so instructive that I will briefly relate it:—

"M., a female, four years old, was seized at 2 A.M., March 7th, 1873, with vomiting, chilliness, and trembling, followed by severe general clonic convulsions lasting about fifteen minutes. On visiting her early in the morning, I found her semi-comatose, with a pulse of 132, which in a few hours rose to 156; temperature $101\frac{1}{4}^{\circ}$, respiration 44; eyes closed; pupils moderately dilated and responding feebly to light; surface presenting a dusky mottling; constant tremulousness, and frequent twitching of limbs. Four grains of bromide of potassium were ordered to be given every hour to two hours, with the usual local measures—namely, ice to the head and nucha, and a hot mustard foot-bath, followed by sinapisms to the extremities.

"8th. Pulse 136; is partly conscious when aroused, but immediately relapses into sleep; head considerably retracted; bowels constipated; vomits occasionally; temperature 102° . Treatment, a leech to each temple, on account of the extreme stupor; other treatment to be continued.

"9th. The leech-bites bled, though slowly, nearly five hours; pulse 180, and so feeble as to be counted with difficulty; temperature $101\frac{1}{2}^{\circ}$. The patient is evidently sinking. Treatment, a teaspoonful of Bourbon whiskey in milk every two hours, beef-tea and other nutritious drinks frequently, also the bromide at intervals. Evening, pulse 172, still feeble.

"10th. Pulse 180, barely perceptible; great hyperæsthesia; temperature of axilla 100° , of fingers and hand below 90° ; axes of eyes directed downwards.

"11th. Pulse still very feeble, varying from 160 to 189; temperature $102\frac{1}{4}^{\circ}$. There has been no intermission in the use of the stimulants or nutriment night or day; pupils moderately dilated and somewhat more sensitive to light.

"After this the patient gradually rallied for a time, so that the pulse became stronger and less frequent, but death finally occurred after nine weeks in a state of emaciation and extreme exhaustion. Slight convulsions occurred in the last hours.

"It is seen that after the loss of blood from two leech bites, this patient passed into a state of extreme exhaustion so that for three days I did not believe that she would live from one hour to another, and death finally occurred. Although the loss of blood may have been useful in relieving the stupor, yet a worse danger resulted. Experience like this, which I believe corresponds with that of other observers, shows how seldom and with what caution the blood of the patient should be abstracted.

"The internal remedy most in favor with the profession of this city, and justly, in the first stage of this disease, is the bromide of potassium, especially in the treatment of children. Evidently a remedy is required which will diminish the calibre of the arterioles, and consequently the hyperæmia of the cerebro-spinal axis and its meningeal covering. Ergot

has been employed for this purpose, and in some instances with a satisfactory result; but bromide of potassium, while it contracts the arterioles of the encephalon, is at the same time a powerful sedative to the nervous system. More than any other safe internal remedy, it prevents convulsions in children, which, occurring in this disease, add a passive to the already intense active congestion of the cerebro-spinal axis. This agent in medicinal doses produces no ill effect, except when given frequently for a lengthened period, when it may accumulate in the system. A child of five years may take five or six grains every two, three, or four hours, according to the urgency of the case. After the first week it should be given less frequently, and finally omitted. The practice of some physicians, of continuing the use of the bromide in frequent large doses after the first or at least second week, is to be deprecated, for after a time it is apt to produce symptoms which can with difficulty be discriminated from those of cerebro-spinal fever. These are stated as follows by Mr. Wood: 'Great muscular debility, dimness of sight with dilated pupils, irregular gait, the patient reeling as though intoxicated, whilst nausea, vomiting, or purgation, with abdominal pain of a dull aching character may, also be present.' (*British Medical Journal*, Oct. 14th, 1872.) It is obviously better after the first week, if the symptoms are no longer urgent, to discontinue the bromide entirely than to continue its use in such doses and for such a period that there may be danger of producing its physiological effects. Nevertheless, it is proper to resume its use during periods of recrudescence, which are so apt to occur at any stage of the disease.

"The bromide cannot be depended on to allay the pain which often, on account of its severity, requires immediate treatment, and sometimes it does not allay the excessive agitation. For these symptoms an opiate is indicated, which in my practice has produced a much more satisfactory result than hydrate of chloral. Quite moderate doses are sufficient to produce the effect desired. A patient of six years was quieted by $\frac{1}{4}$ part of a grain of sulphate of morphia. So useful are opiates in allaying pain in this disease, that some observers, as Niemeyer and Ziemssen, consider them the most valuable of the internal remedial agents which we possess, and the benefit from their use in these cases has certainly had considerable effect in disabusing the minds of physicians of the dread which they have entertained of their employment in acute affections of the brain. Mankoff and others have employed subcutaneous injections of morphia.

"Quinia is suggested as a remedy by the paroxysmal character of the pains and the fever, but I believe that I am sustained by the general experience of physicians in this city in stating that it has very little effect upon either of these symptoms, or upon the course of the disease. I have employed it in small and large doses, as many as fifteen grains per day to a child of thirteen years, but am not aware that it has been of any service except as a tonic. There is perhaps no better remedy for the nausea than bismuth in large doses.

"Frequent counter-irritation along the spine by dry cups or an irritating liniment is useful from the first, and vesication of the nucha by cantharidal colloid or otherwise when the ice-bag is discontinued. Sustaining measures should also be commenced early. Tonics, vegetable and ferruginous, should be administered after the disease has continued a few days, alternating with and finally superseding the bromide. I have in some cases employed the citrate of iron and ammonia. The diet must be nutritious, consisting of the meat broths, milk, etc., during the entire course of the disease. Most patients require alcoholic stimulants sooner or later. In cases presenting a feeble pulse and other evidences of prostration, their early and continued employment is advisable, as in the case which I have related, in which whiskey was administered every two hours after the second day. The constipation is ordinarily best relieved by enemata. The room should be dark, of comfortable temperature, and quiet."

METHODS OF SURGICAL DIAGNOSIS.

The eminent Mr. Erichsen, in a recent lecture reported in the London *Medical Times and Gazette*, says:—

There are three methods that you may employ. The first and simplest method, and happily in surgery we have very simple methods of diagnosis, is by finding one pathognomonic sign. By "pathognomonic" is meant a thing which of itself indicates the nature of a condition. For instance, a person complains of dimness of vision. You look into his eye, and you see an opacity of the lens. That of itself determines at once the nature of his disease, cataract. You need not ask him a single question or go a step further. Again, a person complains of trouble about the bladder. You introduce a sound, and you feel a calculus and hear it struck. Thus at once a single sign, and that sign a pathognomonic one, is determinative in itself and by itself, not only of the existence of a malady, but of the very nature of that malady. You determine by that single sign, not only the existence, but the very nature of the malady that exists. Well, in surgery always seek for the pathognomonic sign, and endeavor to determine, if you possibly can, at once and by a single sign, what the patient's lesion may be.

Now the second method in surgery consists in getting what may be termed a "pathognomonic group" of signs; that is to say, a set of signs which singly and individually are not indicative of any one given disease or injury, but which, taken collectively as a group, indicate incontestably the nature of some given injury or disease. Take, for instance, the case to which I have already alluded, of an elderly person being tripped up upon the floor and being unable to rise. You look at the limb and find that it is somewhat shortened, that it is everted, that the patient is unable to raise it off the ground, that he complains of considerable pain, and that you feel crepitus about the region of the hip. Now any one of these signs, shortening of the limb, eversion of it, inability to move it, and crepitus, any one of these

signs is common to a variety of different injuries and diseases of the lower extremity; but the group, taking them collectively, is indicative of only one single condition, and that condition is fracture of the neck of the femur. Hence, although the individual signs may be untrue in themselves, so far as the determination of any given injury is concerned, they are absolutely true, and incontestably so, when grouped together, in determining the nature of a particular injury. That is the second method, then, of effecting a surgical diagnosis, by getting a pathognomonic group of signs or symptoms, for it will do for either.

The third method is a very important one, and it is the method that was greatly employed in the French school of surgery, and the employment of which undoubtedly led to the high position that it occupied, and does occupy, as a diagnostic school. It is what may be termed the negative method, or what is termed by French surgeons the "method by exclusion." By this method you first of all ascertain what a thing is not, and then by excluding everything that is not, you arrive at last at what it is. It seems a roundabout way of arriving at the truth, but in point of practice it is an exceedingly simple way. Let me give you an illustration. A patient comes to you with a tumor in the scrotum. You are in doubt as to what it is. You examine it first of all by transmitted light. You find that it is not translucent; therefore it is not a hydrocele. You examine the upper part; you find there is no impulse on coughing, and that the cord is not covered; therefore it is not a hernia. You find that the cord itself is not enlarged, is not tortuous, and vermiform in its feel; therefore it is not a varicocele. Having removed hydrocele, hernia, varicocele from any possible tumor of the scrotum, what have you left? Why two conditions, hæmatocele and sarcocele. You find that it has not followed a blow, that it is not globular and uniform, that the scrotum is not discolored; therefore it is not a hæmatocele, *ergo*, it must be the last of these conditions, and that is a tumor of the testicle; a sarcocele. In that way by determining what a thing is not, you speedily arrive at what it is; and this determination, in the hand and in the mind of a practised surgeon is so rapid as to be almost instantaneous. The whole process is going through in his mind with such rapidity that as he lays his hand upon the part he feels for everything, and he finds that four out of five conditions are absent; and his diagnosis is made instantaneously, although it is made by that process of negation or exclusion, and though the steps that lead to it are apparently complicated.

HOSPITAL NOTES AND GLEANINGS.

Operation for Removal of the Female Breast by means of India-rubber Ligatures.—At University College Hospital, on Nov. 21, Sir Henry Thompson performed an operation upon the female breast, which, so far as we are aware, is perfectly new to surgical practice in England. Previous to the entrance of the patient to the theatre, Sir Henry

stated that the plan he was about to adopt had been brought recently under his notice during a visit to Vienna by Professor Dittel. An accident, as it were, suggested the treatment to Prof. Dittel, who now for some time has employed it in over 200 cases, such as of tumours of the breast, in removing the testes and even limbs, and in the cure of fistula in ano. Having been called upon to see a young girl dying from meningitis, the following account of the case was given him: The patient, who had been constantly reproved by her stepmother on account of the untidy state of her hair, was advised, some weeks before her death, to get a tightly-fitting net for her head, and to wear it night and day. This she did till the last, when it was found that the elastic band of the net had cut its way through the scalp and cranium, and was resting on the meninges of the brain, fatal inflammation of which it had set up.

The immense power for effecting the solution not only of the soft tissues of the body, but even of bone, having, by the constantly contracting pressure of an elastic band, been thus so remarkably proved, Professor Dittel resolved to attempt in certain cases to substitute this power for the knife in surgical operations.

The applications of the treatment to the mammary gland by Sir Henry Thompson we will now describe: The patient, a woman of about fifty-three years of age, had for ten years been conscious of a tumour in the right mamma. When first noticed it was seated near the nipple, below and to its outer side, and was of the size of a walnut. As it was discovered about the time of her confinement with her last child, which died soon after its birth, she was led to regard the tumour as a "distended milk-duct." It has gone on increasing, however, though very slowly, and about eight weeks ago the skin covering the tumour commenced to ulcerate. At the time of the operation the histological characters of the tumour were doubtful. It was of the size of a large orange, ulcerated on the surface, somewhat pendulous, and freely moveable upon the adjacent tissue. The patient was a robust and healthy-looking woman. Chloroform having been administered, Sir Henry drew the mamma forward from off the pectoral muscle, and then, with a very long, strong, and slightly curved Liston's needle transfixed the submammary tissue. Through the eye, near the point of the needle, a long piece of very elastic India-rubber tubing, about the thickness of stout whipcord, together with a long silk ligature, was passed. The elastic ligature was then divided, and the needle withdrawn. Each half of the elastic ligature was tied very tightly, so as to embrace one-half the mamma, inclusive of the skin. In fastening the elastic ligature a piece of silk ligature was placed at right angles to the elastic between the skin and the knot, and while the single knot was tightly drawn, the silk was tied around it by an assistant to prevent it slipping. A double knot was then made, and this was secured by again tying the silk around the elastic.

The long silk ligature which had been passed with the elastic tubing through the submammary tissue

was then removed. The purpose of passing this was precautionary, in order that another piece of elastic might be drawn along the same track in the event of either half of that which was first passed breaking. Another precaution very necessary to take is to hold the elastic firmly at the time of dividing it and while withdrawing the needle, otherwise the contractility of the tubing will cause its disappearance through the track made by the needle.

The time likely to ensue before the entire separation of the breast is eight or nine days. The pain excited during any portion of this time is remarkably slight. Sometimes a little pain is suffered for a day or two. In the case of the patient now referred to, there was no pain after the first twenty minutes from the time of recovery from the chloroform, and the suffering during this brief period was not at all severe.—*Med. Times and Gaz.*

A FEW WORDS ON THE MEANS NECESSARY TO BE TAKEN FOR PREVENTING THE SPREAD OF ZYMOTIC DISEASE.

By Dr. F. Page Atkinson, late Surgeon St. Bartholomew's Hospital, Chatham, and Royal South London Dispensary.

We all, no doubt, believe in the truth of the saying, that "prevention is better than cure," but how to prevent disease we are often at a loss to understand. Epidemics are not unfrequently looked upon as direct visitations of Providence, and as such to be quite incapable of being warded off; but to this it may be replied, that Providence has laid down certain laws for the preservation of health, and that if we transgress these, we must expect to suffer sooner or later. Half the illness which takes place may be shown to arise from ignorance of, or a want of respect for, the laws which nature wishes us to follow, and to be, truly speaking, as preventable as colds and burns. It may be asserted, therefore, without fear of contradiction, that by a proper and careful study of nature's laws, we may escape from several of the numerous ills that flesh is now considered heir to. Whenever infectious disease of any kind makes its appearance, we should take a careful survey of the premises where it exists, inquire as to the ventilation, drainage, and water supply, and see that the latter is not contaminated by infiltrations from water closets, dust-bins, manure-heaps, &c. We should then take into consideration the number of persons occupying each room, and the means taken for separating the healthy from the sick. If there is insufficient accommodation for the sick, they should be removed to an hospital in one of the public conveyances which are kept especially for the purpose. Where death occurs, the corpse should be removed to a public mortuary, and the house and all things in it, in either of the above-mentioned cases, should undergo a thorough cleansing and disinfecting. The Sanitary Act of 1866 providing very wisely, among other things, for the prosecution; those who—1st, Use public conveyances while offering under contagious or infectious disorders 2nd, Knowingly convey such people in any public

conveyance; 3rd, Wilfully expose themselves in any street, &c.; 4th, Knowingly let a house or part in which any person has been suffering from any contagious or infectious disorder, without having had it and all the articles in it previously infected.

In order to prevent the spread of zymotic disease from house to house, it is necessary in all cases to provide for—1st, Complete separation of the sick and those in attendance from those who are in health; 2nd, Disinfection of the sick room and all articles in it, both during its occupation and after the removal of the patient; 3rd, Disinfection of the sick room and all articles in it, both during its occupation and after the removal of the patient; 3rd. secretions; 4th, Thorough ventilation.

In the first place, then, the patient should be moved into a separate apartment near the top of the house, with the nurse who is to be in attendance. All curtains, bed furniture, carpets, &c., should be removed prior to its occupation, and no persons should be allowed to enter the room except the medical attendant. Outside the door a sheet should be hung, thoroughly soaked with a solution of carbolic acid, and the nurse should never pass this under any circumstances whatever. All articles of food should be placed under the sheet, and not taken in by the nurse till the servant has gone away. Inside the apartment, disinfection should be carried out by means of sprinkling sulphur on a live coal two or three times a day, and wafting the fumes all around, till sneezing and a feeling of suffocation are produced. By the bedside a basin should be placed for the patient to spit into, containing a solution of carbolic acid. Rags should be used for wiping the nose, &c., and should be burnt immediately afterwards. All soiled bed-linen should be placed in a solution of the acid as it is removed. Discharges from the bowels and kidneys should be disinfected by the same means; and all plates, dishes, glasses, &c., should be washed in boiling water, and thoroughly cleansed with Condry's fluid or chloralum before leaving the room. As soon as the patient is perfectly recovered, he should wash the body thoroughly over with carbolic acid soap. He should then pass out at the door quite naked, and wrap himself in a fresh blanket, which has been left on the outside. In this way he may pass into another room and dress, and then he may safely mix with the other members of the household. The nurse should act in the same way; but before leaving the room she should see that all the linen articles are placed in a solution of carbolic acid, and that the other things are hung upon lines, in order that they may undergo a thorough fumigation. She should next place an old saucepan, containing some hot coals and sulphur, in the middle of the room, and then make her exit, taking care to close the door after her. At the expiration of twenty-four or forty-eight hours, the windows should be thrown open, and disinfection may be then said to be complete.

These rules should be carried out in the case of all infectious diseases; but certain other precautions are necessary to be adopted peculiar to the particular disease we are called upon to treat. For instance,

in the case of *scarlet fever*, as soon as the eruption begins to fade, or as soon as there is the slightest appearance of peeling, the patient should be thoroughly oiled all over, night and morning, for three days. He should then have a warm bath *on going to bed*, and the same process should be repeated at the same interval of time till all signs of peeling have disappeared. When the skin is perfectly clear, he may, after taking a bath, pass, in the manner directed, into another room and dress, and then mix with the other members of the household.

The chief thing to fear in these cases is the thin skin which peels off from the various parts of the body, and floats about imperceptibly in the air. The oiling process and disinfection, if strictly attended to, entirely prevent the spread of the disease.

In order to prevent the spread of *small pox*, it is necessary, on its very first appearance, to vaccinate all in the same house, and, if other cases occur, all in the neighbourhood. The patient should not be allowed to leave his room till all appearance of supuration has passed away. All articles of bed furniture and clothes that have been worn, should be burnt as soon as the case is well. Keeping the apartment dark is of great use in lessening the formation of matter, and so the spread of the disease.

In *enteric fever*, the chief thing one has to do is to see that the secretions are thoroughly disinfected, for it is by this means chiefly that the disease propagates itself. Care must be also taken whenever there is the slightest tendency to a relapse.

To prevent the spread of *typhus fever*, it is absolutely essential that there should be strict isolation and thorough fumigation, as the power of infection in these cases is exceedingly great.

In *cholera*, it is the breath, vomit and stools, that are so particularly infectious; but the disease spreads mostly by the drinking of contaminated water. The stools, therefore, should be thoroughly disinfected and care should be taken that they are not thrown into any place where they are likely to come in contact with the drinking water. In India, the chief thing to do is to try and prevent the natives from depositing their feces in the soil all around the villages, and those who have the disease in an incipient stage from bathing in the tanks.

Diphtheria, *erysipelas*, and *puerperal fever*, are highly infectious and contagious, and it is highly important to see that the hands are thoroughly washed in disinfecting fluid after each examination. It is also as well to avoid going from a case of *erysipelas* direct to examine a healthy wound. When in attendance upon a case of *puerperal fever*, midwifery practice should be given up for a time altogether. The nurse also in charge should be warned not to engage herself for another case until a month or two has elapsed after leaving the house. The same advice also should be given in the case of *scarlatina*.

As regards the nature of the poison or poisons which cause the outbreak of fever, a good deal has already been written, and will still continue to be written. Some say that germs are the originators of disease; others (as Dr. Elliott of Hull), that

these are only the carriers of the poison, since we cannot distinguish between healthy and unhealthy pus, the skin that comes from a healthy body and one affected with scarlatina, &c. Béchamps considers the body to be made up of minute creatures called microzymes, and that when these act harmoniously, the body is in health, and the fermentative processes are deranged, and ill health is the consequence. The microzymes, he says, are not ferments in themselves, but they produce very small creatures called bacteria, and these produce cells. The cells and the bacteria are capable of returning to the microzymic state. After death, all organic matter returns to its original elements, and the microzymes are there to carry on the work of putrefaction. According to this idea the living animal contains within itself the essential elements of life, disease, death, and total destruction; and in order to accomplish these last-mentioned ends, it is unnecessary to suppose the presence of living germs floating in the air.

As to whether germs are or are not the cause of disease, it is still uncertain; but, nevertheless we all admit the benefits that arise from the use of antiseptics and disinfectants, and proper sanitary supervision.—*Edinburgh Medical Journal*.

ON GUARANA AS A REMEDY FOR SICK-HEAD-ACHE.

By Dr. W. Mackdowall, Assistant Medical Officer and Pathologist, West Riding Asylum.

The cases of sick-headache treated with guarana are as follows:—

Case.—M.N., aged 34. This lady has suffered from sick-headache for a great number of years, indeed from childhood. Her attacks were very severe until about eight years ago, when she removed from an inland country town to a residence near the sea. She states that until she was about twenty years of age she was in somewhat delicate health; not suffering from any disease in particular, so far as she knows, excepting her headache, but was languid, weakly, and unfit for active exertion or occupation. After that date her health improved, and has continued excellent up to the present time. She attributes this establishment of her strength to a prolonged residence in the country.

Since early childhood she has suffered from sick-head-ache, and her tortures have continued with increased severity since she fell downstairs and injured her head. This accident occurred when she was about nine years of age. She was unconscious for some hours after the fall, and was confined to bed for some days.

The following is her account of the sick-headaches as they occurred before they decreased in severity eight years ago:—They occurred, as a rule, every three weeks; and she never escaped for longer than a month. She experienced no previous derangement of digestion; but when attack was imminent she frequently had uneasy sensations at the pit of the stomach. These would gradually increase in-

intensity during a few hours, and generally ended in vomiting. As a rule, however, these preliminary stomachic symptoms were absent. Her first head-symptom was a slight throbbing pain, passing, as it were, between the temples or between the forehead and occiput. At the same time a feeling of great depression, with sickness, always appeared. The characteristic symptoms then gradually increased in intensity, and in from three to six hours the attack usually reached its height. Before this stage, however, had been attained, she became quite prostrate, and was obliged to go to bed. These attacks were always, sooner or later, accompanied by vomiting; the act of emptying the stomach increased the pain in the head to an almost unendurable degree; but when it was completely emptied of its contents—usually highly bilious matter—some relief to all the symptoms followed. On an average the headache continued at its maximum during six or seven hours; an hour or two after vomiting the patient generally fell asleep, and then awoke in the morning free from all her previous miseries, but feeling extremely weak and languid.

Shortly, it may be stated that the attacks of sick headache during the past eight years have been, in their leading features, similar to those already described, but somewhat less intense.

The following have been the results of treatment with guarana:—

Feb. 1. Slight symptoms appeared shortly after rising in the morning, and continued to get worse until 7 o'clock p.m. At this time she presented all the indications of an intense attack, and retired to her room, quite unable to bear up longer against her suffering. She now took 3 ss of guarana, with the, to her, very unexpected and satisfactory result, that in about twenty minutes, all sickness and headache had disappeared; and she felt, as she expressed it, like another woman. The drug appeared to her to act like a charm; and so much pleased was she with the result, that she presented herself for inspection to some who had but shortly before witnessed her distressed condition. The improvement in her state was most marked and surprising, for, from being almost quite prostrate, she was at once able to resume her somewhat arduous duties. She also escaped without the occurrence of vomiting.

Feb. 22. During the morning, the usual premonitory symptoms appeared. At once she took 3 ss guarana, the result being that instead of the attack running through all its stages; it disappeared entirely in less than half an hour.

April 8. She awoke in a state of considerable depression; during the day a typical sick headache became developed; but from circumstances she did not take any medicine until 5 p.m., at which time the symptoms were very severe. No benefit resulted from the half-dram of guarana which she then took. At 9 p.m., still feeling extremely ill, she took another 3 ss, and in an hour all the symptoms had disappeared. During the whole day she had been unable to take any food, yet at ten p.m., all nausea had so entirely disappeared, that she was able to take a hearty supper.

Up to the present time (May) she has had no return of sick-ache.

Case 2.—R. D., aged 30; nurse. She states that she had suffered from sick-headache from childhood. The attacks, however, have not been quite so severe during the past four years. This change in their character she associates with her change of residence, for four years ago she left her native county, Leicester, and has since that date resided in Yorkshire. During childhood the attacks were not frequent—perhaps every two or three months; but after reaching puberty, they occurred regularly every month for a number of years. They invariably preceded the appearance as the menstrual flow. As she advanced in age, the attacks occurred at other times beside the menstrual one, so that on an average they come on once a fortnight. None of her brothers or sisters were affected like herself, but her mother suffered severely from sick-headache as long as she lived.

The usual course of attack is as follows:—After slight headache has existed about half an hour, she generally becomes slightly sick. The pain is always confined to the forehead, and is described by her as being of a burning, throbbing character. As the attack proceeds, the pain in the head becomes almost intolerable, and she is in the habit of going to bed, that she may obtain some slight relief through rest and quiet. The sickness rarely terminates in vomiting, but there is intense loathing of food, her appetite having entirely disappeared. On rare occasions the headache has remained at its maximum of severity for from twelve to twenty-four hours; but the average duration of this period may be stated at about six or eight hours. When an attack is disappearing, the sickness always disappears first; the pain in the head then lessens, becoming of a dull and depressing character; then, in about two hours, all disagreeable symptoms disappear, and the patient regains her usual health, being quite free from any depression or exhaustion.

Since her residence in Yorkshire, her headaches have not, as a rule, been so frequent, occurring not oftener than every six weeks; and it has even happened that she has been free from them for three months.

On four occasions she has been treated with guarana, and always with the happiest results.

March 31. After travelling, the promontory symptoms of an attack appeared. On reaching home she at once took half a drachm of guarana, and in less than an hour was quite free from all inconvenience.

April 27. Awoke with headache, but being inclined to try if it would pass off without treatment, she delayed taking her usual dose of guarana. Feeling no better, however, she lay down in bed about 2 p.m. for a short time, but without relief. She then took half a drachm, relieving the sickness immediately, and the headache very soon afterwards.

May 10. About midnight she began to suffer severely from sick-headache and continued ill all night. In the morning she took a little tea, which

made her sick, but with no relief to headache. At 8 a.m. she took the usual dose of guarana, but with no result; at 10.30 a.m. it was repeated with like result, at 2 p.m. another half drachm was taken, which gave relief very soon afterwards.

Case 3.—M. M., aged 25, single, has, suffered from sick-headaches from childhood; indeed, she does not remember a period of her life when she did not suffer from them. When she was a child, they occurred about once a fortnight; but when she reached puberty, they became less frequent, the intervals increasing to four or five weeks. There has never been any connection between the occurrence of menstruation and the date of appearance of a sick headache. For a number of years this young woman has been in delicate health. She labours under phthisis of a very chronic description, though the disease has occasionally assumed a more active form for brief periods, and there have been several rather smart attacks of hæmoptysis. Of late, however, with proper attention to their health, she has continued in moderately fair general condition, and quite able for her work as a nurse, but at the same time very much troubled with headaches.

Since her general health became delicate, her attacks of sick headache have been much more frequent, and indiscretion in diet brings on one at once. As a rule they begin during the night. The first symptom is a dull throbbing pain in the temples; it gradually increases; then sickness comes on; so that in a few hours she is frequently necessitated to lie down in bed. Should the attack prove a mild one, it may pass off in six or seven hours; but it is more common for it to continue during a whole day. On rare occasions, when particularly severe, it has continued for two days. After a sick headache has continued at its maximum for about an hour, the patient invariably vomits a small quantity of bilious fluid, sometimes with some slight relief to the pain in the head.

April 16. Patient awoke in the morning with sick-headache, which continued intense during the day, until 6.30 p.m., when she took half a drachm of guarana, and in half an hour she felt quite relieved.

May 10. Awoke this morning: sick headache in first stage. Shortly after taking the usual dose of guarana, the symptoms began to abate; and by 9 a.m. she was quite free from all discomfort.

Several other cases are related of the same description.—*Practitioner*, Sept., 1873.

THE DIAGNOSIS OF OVARIAN TUMOURS.

NOTES BY DR. C. R. DRYSDALE.

SENIOR PHYSICIAN TO THE METROPOLITAN FREE HOSPITAL.

A patient comes before us with increased circumference of the abdomen and abnormal resistance, and who is believed to be suffering from ovarian disease. Our first task is to see that there truly is a tumour present. It is easy to make up our mind on the point if a clearly circumscribed tumour is felt in the abdomen, but quite different when the borders of the

tumour are undistinguishable and there is great tension of the abdominal walls. This may arise either from tympanites or from ascites without any cyst being present.

It would at first sight appear unpardonable to take tympanites for tumour; but the records of medicine show that the mistake has been made by even the most experienced practitioners. Simpson (*Works*, 1872, vol. iii., p. 426) mentions six cases of abdominal section, in which tympanites was found, no abdominal tumour. It is well known, too, that tympanitic women are frequently supposed to be pregnant by careless medical practitioners; and every experienced man must remember hosts of cases of hysterical tympanites when the tension of the abdominal wall, and the spasm of the recti muscles have at first sight tempted him to make a diagnosis as to the presence of ascites, hydatids of the liver, or ovarian dropsy. Percussion gives, of course, in tympanites, direct evidence of the absence of fluid and the presence of gas; and if the patient be put under the influence of ether, the phantom tumour often at once subsides and the abdomen can easily be explored by the hand. Even without the previous administration of anaesthetics, examination of the abdomen may be made if the patient lie on the back with the thighs flexed and the practitioner keep up constant pressure on the abdominal wall by the hand directed towards the vertebrae of the abdomen. The resistance of the abdominal walls soon gives way and the cavities of the abdomen and pelvis can be examined. But there are cases where masses of fat in the abdominal walls or internal organs are with great difficulty diagnosed from tumours of the abdomen.

With respect to those cases in which there is fluid present, and when we have to make out whether we are in presence of ascites or cystic ovarian tumour, the diagnosis is easily made when we can grasp the ovarian cyst and push it backwards and forwards in the abdomen beneath the abdominal walls, or, on the other hand, when every change of position of the patient makes the fluid flow to the dependent part of the abdomen. But when there is great accumulation of fluid our difficulties commence, since a large cyst with thin walls has no clear definite form, and the fluctuation is so general as to make us uncertain as to the presence of a cyst.

Some general rules may assist; for instance, in ascites the abdomen is generally equally enlarged at both sides, the lumbar regions are full, the navel region is flat and the navel prominent. When there is a cyst the form of the abdomen is generally more pointed or barrel-shaped, the navel does not protrude, the expansion of the abdomen is unequal, and one side is more prominent than the other. As to the enlargement of the veins, this may occur in both cases, and there is nothing diagnostic in their appearance. Œdema of the extremities is certainly more common in ascites; but this is not a symptom of much value, since the pressure of cysts on the pelvic veins may produce œdema of the ankles. The chief means of acquiring certainty in diagnosis are those of palpation and percussion.

With regard to percussion, in ascites the fluid gravitates in all positions of the patient to the lowest side, and thus the percussion note varies whether the patient lies on the back or on the side; whilst in encysted fluid the territory of absolute percussion, dulness remains constant, whatever be the position of the patient. Thus usually, when ascites is present, the loins sound dull on percussion when the patient is in the prone position, and the navel region sounds tympanitic; whilst, in cysts, the opposite takes place, since the tumour arising from the pelvis shoves the intestines upwards and behind it. Yet some circumstances may deceive in this matter. In the first place the right iliac and lumbar region may be tympanitic in ascites from tympanites of the cæcum. Then, with regard to fluctuation, that is certainly usually more marked in ascites; but it may be as well marked in some cysts. In fact persons with ascites may give but ill-marked fluctuation. In cystic disease the fluctuation is absent where the percussion note shows the intestine, as in the loins and the epigastrium; but, in ascites, fluctuation is perceptible even in places where there is intestinal percussion note.

In very large effusions of fluid, again, the bowel may not reach the abdominal wall, on account of shortness of the mesentery, and there are large cysts, which press into the lumbar regions so as to cause dulness on percussion. It has occurred that a cyst of the ovary may contain gas, from its communicating with the intestine, or having been previously punctured; and, in this case, there will be tympanitic percussion note.

In such doubtful cases puncture alone will give satisfactory elements for diagnosis; although it is by no means quite free from danger. Emptying the abdomen gives great information, since, after this is accomplished, it becomes first of all possible to palpate and percuss the abdominal organs; but it occurs sometimes that even this plan fails to be of great service on account of too little fluid being removed, or because there exist adhesions, whether parietal or visceral. The examination of the fluid drawn off is of great importance; and this examination should be both microscopical and chemical.

Dr. Otto Spiegelberg (*Samlung-der Klinischer Vorträge*, No. 55), who has paid great attention to this point, notes that the contents of ovarian cysts vary from a watery, clear, yellow fluid up to a tough, calloid, dirty-brown or yellowish-green mass; whereas ascitic fluid is always thin and comparatively clear. In cysts we find mucin, albumen, and especially paralbumin,* which last substance we never find in ascitic fluid. Ascitic fluid is poor in solid material, but on exposure to the air it deposits a fibrine like sediment, which is not the case with the contents of cysts. The microscopic appearances are dissimilar, since in ascites we find the endothelium of the serous membrane and corpuscles of the lymph sacs; whilst in ovarian cysts, cylindrical epithelium is found, with portions of cells, large fat cells, and often cylindrical cells. In addition to these are

* See note on next page.

occasionally seen masses of detritus, crystals of cholesterine, and products of dermoid formation, with here and there altered blood-disks and pigment cells. In a word, in ascites we meet with the elements of a lymph cavity; in cysts, with epithelial formations. When ascites and cysts are both present both elements will be met with.

It must, however, be noticed that the examination of the fluid is sometimes tedious, and it requires some considerable time before the diagnostic points can be clearly recognised. Some days are required occasionally for the chemical investigation to give a clear result.

Should this method of research still leave us in difficulties, examination may be made by the rectum, in order to assure ourselves that a tumour in the pelvis is ovarian, and that it does not belong to the uterus itself. Many errors are committed in this matter. If we succeed by examination *per vaginam* to isolate the tumour from the uterus, we have gained much; as, in this case, we have most likely ovarian disease present. As a general rule, the uterus lies in front of the hard and enlarged ovary, as it does before the organ when not enlarged, and may be prolapsed and greatly anteverted or flexed, but the uterus may also be felt retroverted behind the tumour.

It is not every ovarian tumour that can be reached from the vagina, either on account of the long pedicle or because there are adhesions between it and the uterus or intestines. Here the most important characteristics of an ovarian tumour, its rising out of the pelvis and being free from the uterus, are wanting. In such cases it may be quite impossible to form any accurate diagnosis, even after the most careful examination. It must be remembered that, in rare cases, we may have to do with cysts of the kidneys as well as with tumours of the uterus, and even in pregnancy in some cases.

The great difficulty in diagnosis between fibrous tumour of the uterus and ovarian disease is well known, and although fibroid degeneration of the ovaries is very rare it yet does occasionally occur, and fibrous tumours also sometimes fluctuate a little and thus resemble ovarian cysts. When these doubtful cases occur, examination may be made by the rectum, introducing the whole hand or the half of it into the intestine. (See Simon's article in the *Deutsche Klinik* for 1872, No. 46, on the method.) The patient should have some anæsthetic such as ether during the examination, which is made with

the patient lying on the back. The patient must be warned that defecation may present some difficulty for a week or two, or even that there may be difficulty in retaining the fæces.

Those who have practised this method of investigation assure us that it is wonderful how well we are able to explore the pelvic organs by its means, and to recognise alterations in shape or position of the organs. In many cases the origin of the tumour can be felt, and an absolute diagnosis can be made; as for instance, the separation of a fibroid of the uterus from an ovarian cyst can often be made. But there are cases in which an exploration even by the rectum fails to enable the practitioner to make up his mind; and these are precisely the cases in which there is a doubt as to whether an ovarian tumour or a fibroid tumour of the uterus is present.

Preliminary incisions for the sake of clearing up the diagnosis are very dangerous, and should only be undertaken when the patient and the practitioner have fully made up their minds to the operation of excision in case of necessity. The incision must be large enough to admit four fingers or the whole hand into the cavity of the abdomen, and if carefully conducted, is not so dangerous as might be supposed, since of twenty-four cases, Spencer Wells ("Tumours of the Ovaries," p. 464) says that seventeen recovered from the incision without any harm.

Small ovarian cysts have been taken for melbova kidneys, and it is known that movable kidney is most commonly met with among women. Enlargement of the kidneys and hydatid cysts of these organs have been mistaken for ovarian disease on more than one occasion. Incisions in the abdomen have even been made before the character of the tumour was recognised. A cyst of the kidney, it appears, may lie in the middle line, have adhesions with the pelvic organs and be movable, and, moreover, may be large enough to descend into the pelvis. In many cases puncture will give information from the sediments and salts of the urine being present, or hydatids appearing, since these have not been noticed in ovarian cysts; but urine is not always contained in cysts of the kidney. In such cases rectal examination is of the greatest use, since this shows whether the tumour does or does not proceed from the pelvic cavity.

Tumours of the mesentery may give rise to difficulty, when large enough to descend into the pelvis, especially when peritoneal fluid becomes involved in the mass, as takes place in cancerous tumours. The character of the fluid will separate these from ovarian tumours. Such punctures as are made for diagnosis should be made when the bladder is empty. Tumours caused by fæcal accumulations in the colon must be thought of, and tumours of the spleen, liver, must be borne in mind.

The multilocular character of an ovarian cyst is easily made out when well-marked, through the irregular, uneven feeling of the superficies of the tumour, the uncertain fluctuation, and feeling of hard masses in company with large cystic spaces. Unilocular cysts are comparatively rare, and not so

* The fluid of an enlarged Graefian follicle may externally resemble that of ascites; it is clear, pure, without many morphological conditions, and contains paralbumin, besides epithelium not well-marked.

The important marks of paralbumin are as follows:--

A part of the fluid, after the sediment has been allowed to deposit in a cold place, is treated with plenty of water, and then a stream of carbonic acid gas is conducted through it; a flocculent precipitate shows the existence of paralbumin.

Another part of the fluid is treated with absolute alcohol. The precipitate which then falls is kept under alcohol for several days (three days), then filtered, and then the precipitate warmed with distilled water for some hours. By this means the paralbumin part is again dissolved.

easily made out, since three or four large cysts may be very like a single one, which is of importance in the question of drainage and injection. Indeed, the uncertainty of this diagnosis makes the latter experiment have many opponents. The diagnosis as to which ovary is affected is very difficult; as also the ascertaining where and what kind of adhesions are present. This is now admitted on all hands.—*Dublin Medical Press and Circular.*

IODIDE OF POTASSIUM AND CARBONATE OF AMMONIA IN THE TREATMENT OF SYPHILIS, INTERNAL ANEURISM, AND CHRONIC RHEUMATISM.

Sir James Paget was the first to call the attention of the medical profession to the following interesting fact; viz., that carbonate of ammonia greatly increases the therapeutic action of iodide of potassium. I have had extensive experience in the treatment of syphilis, and have tried it with the best results, and find that five grains of iodide of potassium, combined with three grains of carbonate of ammonia, are equal to 8 grains of the potassium salt administered in the ordinary way. The following case is a good example.

John —, aged 50, consulted me about a sore situated on his left arm. There was a profuse discharge from it, and the smell was intolerable. On asking him a few questions, I got the following history. He had been a married man, his wife having died a short time ago; he had no children. Some years ago he contracted syphilis, and was treated by mercury, pushed to excessive salivation. The secondary symptoms had been well marked, and the sore about which he consulted me was of eight months' standing. He consulted several surgeons, and could get no relief. I ordered him five-grain doses of iodide of potassium, combined with three grains of carbonate of ammonia. After taking a few tablespoonfuls of the bottle, the bad smell altogether disappeared, as a man told me who was sleeping in the same room; at first he could not bear the smell, but after taking a few tablespoonfuls of the bottle he could detect no smell. This man remained under my care for about a month, and in that short time was perfectly cured, and in very good health and spirits. I have also found it of the greatest service in the treatment of internal aneurism, by relieving the pain and helping to consolidate the tumour. Dr. Frerichs has recommended iodide of potassium in the treatment of waxy liver occurring in syphilitic patients. I think that the preceding facts are well worth the notice of the profession; but I would caution medical men how they increase the dose of the iodide of potassium, for, if the carbonate of ammonia be good, it will greatly increase the therapeutic action of the iodide. JOSEPH P. M'SWEENEY, L.R.C.S.I., Carlow, Ireland. —*British Medical Journal*, Jan. 10, 1874.

BELIEVERS WANTED.

Dr. Sayre, of Burlington, Kentucky, reports in the *Cincinnati Clinic* a case in which—a month

after impaction—he removed through an opening in the abdomen a stick of firewood, *sixteen inches long and two and a half in diameter*, which had been forcibly driven in *per vaginam*. That miracle is not enough. He recounts how the woman was at the time seven months pregnant, that she gave birth in due time to a healthy boy, and three days afterwards was delivered of another stick a foot long and two inches thick. The case, though gravely and circumstantially related, must, we presume, be intended as a satire on Medical literature, for the author concludes with the remark:—"If any one doubts the truth of the story, I could prove it to their satisfaction had not my witnesses all been killed during the late war."

PHOSPHORUS IN NEURALGIA.

In October of last year I wrote a letter to the *British Medical Journal*, calling attention to the value of phosphorus in the treatment of neuralgia. Since this date I have given it a somewhat extensive trial, the general result of which is to confirm the favorable report I made of it in my first letter. I have prescribed it in various neuroses, in melancholia, in impotence, in mercurial tremor, in locomotor ataxy, &c., but have come to the conclusion that its value is most conspicuously and constantly seen in cases of nerve-pain, accompanied or caused by asthenia: indeed, while it has appeared to me quite inert in most of the separate diseases I have mentioned above, it has rarely disappointed me, when properly administered, in true cases of anæmic or asthenic neuralgia, amongst the remedies for which disorders I believe it will ever hold a high and secure place. Its mode of administration is, however, of importance; and while in many respects agreeing with Mr. S. Ashburton Thompson in his remarks upon this remedy, which appear in the *Practitioner* for July, I cannot indorse his statement as to the wisdom, or even the safety, of beginning with a dose of one-twelfth of a grain every four hours. M. Gubler, in a recent number of the *Bulletin Général Thérapeutique*, is more correct, I think, in urging great caution in the administration of this powerful remedy: indeed, in the seventeen cases treated by Mr. Thompson, one suffered from serious and alarming symptoms, we may fairly presume, of the phosphorus, which was administered in the dose of one-twelfth of a grain. My custom is to commence with one-hundredth of a grain, and gradually increase this by one-fiftieth of a grain at a time, until, if necessary, one-tenth of a grain is taken with each dose. Beyond this quantity I do not go; as I think that, if the remedy be of use, relief will be attained by this dose equally with a larger. After trying several preparations, I now use a formula which Mr. Potts, dispenser to the Manchester Royal Infirmary, hit upon, and which seems to answer every purpose, in being tasteless, transparent, and readily prepared. He dissolves ten grains of phosphorus in two ounces of ether, agitating the solution from time to time; and of this solution, one minim (containing one-hundredth of a grain) is administered in an ounce of

water with half a drachm of glycerine. The glycerine suspends the phosphorus so perfectly that a transparent mixture is the result. The addition of a little bitter infusion entirely removes any *soupeon* of lucifer-matches which may hover about the medicine.—*Bradley*.—*Brit. Med. Journ.*, Oct. 18, '73.

OBSTINATE VOMITING OF PREGNANCY, CURED BY ENEMATA OF BROMIDE OF POTASSIUM.

Dr. GIRABETTI has successfully treated the obstinate vomiting of pregnancy by enemata of bromide of potassium given in increasing doses; commencing with 6 grammes (about 92 grains) the first day, 8 grammes the second, and 10 grammes the third; after which the dose is lessened in proportion to the effect produced. In one case the vomitings were arrested by this treatment in three days.—*La Tribune Médicale*, 23 Nov. 1873, from *Rev. Méd.*

TO DISGUISE CASTOR OIL.

A writer in the Canadian Pharmaceutical Journal recommends for this purpose the following formula:

R. Ol. ricini,	5j.
Ol. anisi,	gtt x.
Chloroform,	gtt x.
Shake well together, then add	
Mucil. acaciæ,	5 ss.

Shake well and make up to two ounces of water.

Mr. Gregory, in the *Amer. Jour. of Pharmacy*, says:—

For some twelve or fourteen years past I have used the following formula for a Castor Oil draught, which has proved very acceptable to adults who could not get down the pure oil. For children it does not answer so well, the dose of necessity being double that of the oil:

R. Ol. ricini,	3 j.
Mucil. acaciæ,	5 ij.
Shake well together, then add	
Syr. simp.	3 ij.

THE EMPLOYMENT OF MINT FOR THE SUPPRESSION OF THE MILK.

Dr. Dasara observes that the knowledge of the antilactiferous properties of mint appears to have been possessed in very ancient times, since Dioscorides mentions the fact in his works, and subsequent writers have only confirmed his statement. Linnaeus observed that cows that ate mint in their pastures yielded a serous milk, and Laewis affirmed that the coagulation of milk in which some leaves of mint were placed was retarded. More recently, M. Desbois de Rochefort, experimenting on mint, found that fomentations of mint applied to the breast, and the infusion taken internally, were capable of suppressing the lacteal secretion, and of preventing the usual accidents attending milk fever in puerperal women. Trousseau expressed some doubt respecting this action of mint in his treatise on *Materia Medica*. But Dr. Pasquale Pepre, in a note on Trousseau's observation, remarks that the fresh leaves of mint

placed in the axilla are commonly used in Naples to suppress the milk. Dr. Dasara determined to experiment for himself, and gives the application of mint poultices made from the young sprigs at various periods of lactation, and the following are the conclusions at which he has arrived:—1. It is an established fact that mint has the power of suppressing the lacteal secretion. 2. The suppression of the secretion takes place at whatever period of lactation the mint is employed. 3. The effect takes place in a very short space of time, according to his experiments in from three to five days. 4. The suppressive action of mint can be localized to one breast. 5. No danger, nor even any inconvenience arises, either to the mother or child, either from the use of the mint or from the suppression of the secretion. Signor Dasara nowhere states in his paper the species of mint he employed; the omission is to be regretted.—*Rivista Teorico Practica*, Fase. vi., 1873. *Giugno*.—*The Practitioner*, Nov., '73.

RINGWORM IN CHILDREN.

Dr. Fox, in the *Lancet*, recommends that whenever a child is brought to the practitioner for his advice on account of the presence of what seem to be scurfy-looking places on the head, if these are small, and the general surface of the scalp is healthy, they are to be inspected for ringworm. A careful search should be made for broken-off hairs, and these or the scales, and any attached hairs, should be submitted to microscopic examination for fungus elements in them. In cases of chronic ringworm, all merely scurfy patches should be carefully examined, for a solitary piece of dead hair lodged in the follicle may explain the mischief, as it is generally loaded with fungus elements, which are rapidly sown broadcast to re-light up the old mischief if parasiticide treatment is abandoned. Such ill-developed cases of ringworm, as before observed, may be the source of infection to many a child in public institutions and schools.

The treatment of these cases consists in very carefully getting away every particle of scalliness, and fully epilating the scurfy area, and applying any simple parasiticide until the hair grows healthily again; epilation being repeated to get rid of all short, dull, and opaque-looking hairs.

Dr. Duckworth has recently called attention to the effect of chloroform in rendering diseased hairs in ringworm opaque; but it will be evident that this effect will not be marked where only two or three short hairs are present, whilst the test will be of no value where there are only diseased pieces of hair filling up the follicles and not projecting above the level of the latter.

CHLOROFORMIZATION DURING SLEEP.

Dr. W. M. Whitmarsh states (*Lancet*): "Having occasion to perform circumcision on a very nervous child, aged six years, and the evening being selected by the parents for the operation, I found on my

arrival the little patient fast asleep. Not wishing to lose so good an opportunity, I, with my friend Mr. Gandy, thought it advisable to administer chloroform at once. This was done by pouring ten drops on a piece of lint, and repeating it until one drachm had been given, when the patient was thoroughly under its influence. The operation was then performed, and the patient dressed, not waking till half an hour after. The pulse did not appear to differ from that ordinarily observed during the administration of chloroform. It would be interesting to know if this mode of giving chloroform has been noticed by the profession, and whether in nervous patients and young children it would not be preferable to the shock to the system occasioned by fright and fear of suffocation."—*The Clinic*.

A CASE OF IMPREGNATION WITHOUT INTROMISSION.

BY THOMAS HAY, M.D.,
Philadelphia.

The following case is interesting as illustrating the fact that impregnation can take place without intromission. It shows, too, that a persistent hymen is no evidence in case of rape.

In this case the semen was expended on the external parts, and the spermatozoa, by their peculiar motions, through affinity or attraction, found their way into the uterus, and came in contact with, and fecundated, the ovum.

I was visited by Mr. and Mrs. G., from New Jersey, in consequence of enlargement of the lady's abdomen. A belief was induced that a tumor from disease had made its appearance, and that it was growing inside.

This belief was strengthened and almost confirmed by the fact that the existence of pregnancy was not thought possible, and such opinion was not entertained in her case. She had been married more than four months there *never was intromission*, and the *courses appeared regularly as usual*.

The husband was aware of the presence of an unyielding obstacle, and the severe pain at coition made penetration impossible. Modesty and other reasons caused delay in seeking medical advice till the already enlarged abdomen was increased in size, and the pain during intercourse had become so great that it was no longer attempted.

Examination showed a strong, unyielding hymen, attached all round the vagina *near its entrance*, having a hole above the middle large enough only to admit the tip of the little finger; a vascular tumor of the urethra, and extensive erythema of the vulva; the parts were irritable, and the touch of the finger caused the patient to cry out from pain.

I made a crucial incision into the hymen, cut off the four angular flaps, excised the vascular tumor, and applied caustic.

The opening made was maintained by cylinders of lint. The pelvic cavity was normal, and the parts soon healed.

The lady had been three months pregnant, and as the signs of pregnancy increased, she, as well as

the husband, became better satisfied with my diagnosis; and when, after about six months, she was delivered of a healthy, well-developed boy, both were convinced of its correctness, and, as indulgence in the connubial privilege was no longer a cause of pain, they were quite happy.—*Philadelphia Medical Times*.

CANCER OF THE BREAST.

Prof. Willard Parker, New York—*Medical Record*, Sept. 1, 1873—gives an interesting *resume* of his experience with cancer of the breast. This extends over forty years, and includes 295 cases. He concludes that—

1. The disease is not hereditary, or if so, only in a very limited degree.

2. The disease begins as a local disease, positively and purely. It becomes constitutional just as syphilis begins as a local disease and becomes constitutional.

3. The disease occurs in those of vigorous health, instead of being connected with those conditions in which consumption occurs.

4. Cancerous parents may beget tuberculous offspring.

5. The moral constitution has a powerful influence on the development or the prevention of the development of cancer.

6. There is a great parallelism and analogy existing between cancer and syphilis. Both begin by local irritation. Syphilis is inoculable, but cancer is not. We have both secondary syphilis and secondary cancer.

A DISCRIMINATING PHYSICIAN.

The following characteristic story is going the round of the Parisian Press at the expense of Dr. Bouvart, a close observer of human nature:—"One morning, on entering the chamber of a French marquis, whom he had attended through a very dangerous illness, the doctor was thus accosted, 'Good day to you, Dr. Bouvart; I feel quite in spirits, and think my fever has left me.'—'I am sure it has,' replied Bouvart dryly. The very first expression you used convinced me of it.'—'Pray explain yourself.'—'Nothing is easier. In the first day of your illness, when your life was in danger, I was your dearest friend; as you began to get better, I was your good Bouvart; and now I am Dr. Bouvart; depend upon it you are quite recovered.'—*Med. Press and Circular*, Jan. 15, 1874.

A STRANGE SUGGESTION.

The *St. Louis New Era* makes the following strange suggestion. We hardly think it will be carried into effect. It would be a fatal advertisement for some M. D.'s:—"In marriage notices it is usual to give the name of the clergyman who performed the ceremony, and with usual propriety, in obituary notices, the name of the attending physician should be given."—*The Doctor*, November 1, 1873.

ON THE TREATMENT OF TYPHOID FEVER BY
INTERNAL DISINFECTION.

BY STEPHEN SKINNER, M.D.

(The Practitioner, September.)

Mr. Stephen Skinner contributes a short paper on the treatment of enteric fever by the use of sulpho-carbolate of sodium. He administers the drug in twenty-grain doses, ever fourth hour, and gradually increases the quantity during the next few days to thirty grains. He appends twenty cases, in which this mode of treatment was carried out, one case only terminating fatally. He believes that, in cases in which the drug was administered during the period of incubation, the disease either ran more quickly, or it did not become developed. The opinion which he entertains regarding the effect of the remedy is, however, he admits, only conjectural; but he advocates a further trial of the salt to settle its real use or uselessness.

SWALLOWING A BELL.

It has often been a moot question as to what sized foreign body would be capable of passing through the alimentary canal, and being discharged *per rectum*. In the last *Indian Medical Gazette* an interesting case bearing upon the question is reported by Mr. Higginson. He reports that a child of four years of age put a "ghungree" (a little brass bell such as is commonly attached to ankle ornaments) into her mouth and accidentally swallowed it; the child at once ran to her father and told him what had happened: as she felt as if the thing had stuck halfway, the father made her eat a piece of bread to force it into the stomach. Application was then made to him for a purgative. He directed the parents not to give any medicine whatsoever, to keep the child quiet, and give her a hearty meal of her ordinary food, in order that the foreign body might haply get surrounded by feculent matter, and so pass through safely. Next day the child complained of pain in the belly, and soon after had a motion, in which the "ghungree" was found imbedded.

The bell is three quarters of an inch long, and an inch and a half in circumference round its middle; it tapers towards each end, to one of which is soldered a little ring, the other being cleft to admit of a small stone.

THUMB-SUCKING.

I have observed that a particular and rather common deformity of the chest is caused by the habit of sucking the thumb in infancy and early childhood. The weight of the arm on the thorax of the child during sleep produces depression of the ribs in the line occupied by the arm when the thumb is placed in the mouth. As this is a very important effect of "thumb-sucking" never hitherto pointed out, I think it desirable to place this note on record for the benefit of other observers.—*Do-bell—Brit. Med. Journ., Nov. 8, '73.*

MEANS OF ARRESTING VOMITING CAUSED BY THE
COUGH OF PHTHISIS.

The anæsthetic action of bromide of potassium to the pharynx has been utilized by the surgeons in delicate operations in this region, as staphylorrhaphy. One of our Lyonesse confrères, Dr. A. Bonnet, advised this agent to combat the cough in phthisis and more especially the vomiting provoked by cough.

The simple means advised by Dr. Woillez consists in painting the pharynx with a pencil dipped in a concentrated solution of the bromide of potassium. We can approve of this method, and of the happy results obtained by the physician at the Laraboisière.

A morsel of charpie saturated in a solution composed of one-third pure bromide of potassium and two-thirds water is passed rapidly over the pharynx before break-fast in the morning, and at evening, and the patient is directed to refrain from coughing as long as possible.

This application checked vomiting immediately on the first application in four patients. In other cases, its action was less immediate, but still favorable. This remarkable result follows from all cases; in nine patients who vomited habitually after meals, fifty-two applications were made and seven times only did vomiting ensue after treatment was commenced, if the operation had been repeated immediately after taking food.

It is probable that the employment of these pharyngeal applications with the bromide of potassium may render service in other cases, as in the emesis of inanition, pregnancy, etc. In all cases it has the advantage of simplicity, facility of application and freedom from any inconvenience.—*Lyon Medicale, Nov. 23, 1873.*

QUININE PILL MASS.

M. Berquier, of Provins, in the *Repertoire de Pharmacie*, suggests the following formula for a quinine pill mass:—

R. Sulphate of quinine,	30 grains.
Powdered gum,	5 "
Glycerine,	10 "

Mix the gum with the glycerine and then incorporate the quinine, beating it well in a mortar.

This is said to give a mass of good pilular consistence, which retains its softness, and can be easily rolled into pills. It can readily be worked up with other ingredients, and is not bulky. Three grains of this mass are equal to two grains of sulphate of quinine.

REMEDY FOR CHRONIC HOARSENESS.

In chronic hoarseness arising from thickening of the vocal cords and adjacent membrane, the ammoniated tincture of guaiacum is often a very efficacious remedy. It may be approximately mixed with equal parts of the syrup of senega, and a teaspoonful of the mixture given two or three times a day.—*American Practitioner.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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MONTREAL, FEBRUARY, 1874.

CITRATE OF MAGNESIA UNDER DIFFICULTIES.

English druggists have been thrown into a state of great excitement and consternation by the recent prosecution of one of their number for selling, as citrate of magnesia, the ordinary granular effervescent salt of commerce, which, on analysis, was found to be altogether devoid of the base indicated. The circumstances are, briefly, as follows:—The Sanitary Inspector of Bermondsey called at the shop of a druggist, residing in that district, and presented an order, or prescription, for "Magnes. Cit. Effervescens, ʒ iv." The druggist, being out of the article, procured a supply from a neighbor. From this the Inspector's prescription was filled, and that functionary went on his way rejoicing to hand over the medicine to the district analyst, in order that its chemical shortcomings might be revealed. It is needless to say that analysis failed to show a trace of magnesia. The druggist was therefore summoned, under the Adulteration Act, and, after the hearing of evidence, was required to pay a penalty of ten pounds sterling, together with the costs of the analysis.

It may well be conceived that this decision has aroused British pharmacists, and also given rise to a general feeling of uncertainty and alarm throughout the drug trade. This arises not only in regard to the decision as specially applied to citrate of magnesia, but to the principle involved, that a chemist ought to be thoroughly acquainted with the character and quality of the articles in which he deals; that ignorance of the composition of any article cannot, perhaps, be urged as a plea, nor can the responsibility be placed upon the manufacturer or wholesale dealer.

At a meeting of the Pharmaceutical Society, held Nov. 5th, this case was discussed at great length in all its bearings. At that time, it did not seem probable that the Society would take action against the decision. It was thought that such a course would compromise the dignity of the organization, and bring it to the level of a Trade Protection Society.

One impression seemed general—that the name of the granular effervescent citrate of magnesia must be changed to something more nearly approximating to truth and correct nomenclature. Many names were suggested, but none finally decided on. The pharmacopœial designation, *Sodæ Citro-tartras Effervescens*, appeared to be regarded with most favor. It was very properly urged that the public would not recognize this name, and, to meet this, a note explaining the change would have to be appended to each label.

Mr. Bishop, the originator of the granular salt, was present at this meeting. He made a very satisfactory statement that though the compound sold by the defendant in the case referred to was not of his (Mr. Bishop's) manufacture, yet as he had been the originator of the preparation, he would stand by his offspring, and would see that the defendant in the suit was at no pecuniary loss. Mr. Bishop had resolved to change the name of his preparation, in all probability calling it, "Citro-tartrate of Soda with Magnesia," some salt of the latter base being present.

Such is the state of the case as it at present stands. So far as our experience extends in the use of this preparation, we must candidly say that we have seen but little good from its employment. In eight cases out of every twelve when we have prescribed it, it has proved all but inert. We have not lately looked upon it with much favor. The public, who so often look for elegance in a preparation, instead of purity, will, perhaps, still swallow it *ad libitum*, although it is now known in truth to have been a fraud, not only on the public, but on the profession. This is another of the many illustrations that, even in trade, honesty is the best policy.

MONTREAL MATERNITY HOSPITAL.

The success which has attended the establishment of this Hospital has been very great, showing the absolute necessity which existed for such an Institution. On the 1st of May it will be removed to very excellent quarters on St. Antoine Street, where the accommodation will be very greatly increased.

THE OLDEST TEACHER OF MEDICINE.

We notice by the *Philadelphia Medical Reporter*, that Dr. James McNaughton, President of the Albany Medical College, and its Professor of Practice of Medicine, is now the oldest medical lecturer in active service. He is at present engaged in delivering his fifty-third annual course of lectures,

and during this more than half a century, he has not missed a dozen lectures or been confined to the house a week by sickness. He was born on the Grampian hills in Perthshire, Scotland, and graduated at the University of Edinburgh in 1816. The following year he came to Quebec in charge of an emigrant ship, and went to Albany to visit some relatives. He was induced to settle there, and very soon gained an extensive practice. He is now seventy-seven years old, and is hale, and active for his age; all his early contemporaries are gone. In the lecture field Professor Christison of Edinburgh, is the next oldest Professor in harness, having commenced work in 1838.

SURGICAL ITEMS.

Dr. Hingston removed, during last month at the Hotel Dieu, Montreal, the whole of the superior maxilla, one half the bones of the nose back to the ethmoid. The operation was performed for the removal of an enormous malignant tumor. The deformity resulting was less than that for which the operation was undertaken. The patient returned to his home in Upper Canada in ten days after the operation.

TO OUR SUBSCRIBERS.

In the present number we enclose accounts to all subscribers, and we respectfully request a prompt remittance. We have placed the Record at the lowest possible rate—the subscription only amounting to one dollar and eighty-eight cents per year—when the postage, which we have to prepay, is deducted. The necessity of our friends not procrastinating must, therefore, be obvious to them all. Upon our list we have the names of quite a number who have taken the *Record* since its first issue—without having as yet made us any payment. In every case we are willing to ascribe this simply to neglect, for we cannot conceive any person who has been educated as a Physician, willingly receiving a periodical, and not paying for it. Those of our subscribers who occupy this position will find their accounts written in RED INK, and we have to say to them that if, after waiting a reasonable time, we do not receive the amount due us—their names will be removed from our books.

PERSONAL.

Dr. Fenwick, of Montreal, was on the 6th February presented with an address from his fellow practitioners—sympathising with him in his present illness, and wishing him a speedy recovery, in which

wish we are sure all his friends throughout the country will join. Accompanying the address was a purse of over a thousand dollars.

Dr. McNeice of Bury, (M.D. McGill College, 1866) was on New Year's Eve presented by the residents of the Township of Bury with an address and a testimonial valued at \$200. We congratulate Dr. McNeice on this substantial appreciation of his arduous labours.

Dr. Nelson Loverin (McGill College, 1854) is practising in Montreal.

We regret to hear that Dr. G. P. Girdwood, Professor of Practical Chemistry, McGill College, fell on Friday evening, February 20th, fracturing the tibia and fibula of his right leg. He is progressing favorably.

OBITUARY.

Dr. George E. Keator of St. John, New Brunswick, died early in January, after a short illness, from Acute Laryngites. Dr. Keator, if we mistake not, was a graduate of Harvard University, Cambridge, and was an earnest student of his profession. He visited Montreal in 1869, during the meeting of the Canadian Medical Association, and made many friends by his genial humor and warm open-hearted manner. Dr. Keator occupied a prominent position among his *confreres* in St. John, held several appointments, and was one of the Medical Examiners of the New York Life Insurance Company.

Dr. DeWolf, formerly of St. John, New Brunswick, but latterly of St. Stephen, died the end of January at the advanced age of 86 years. For many years he was one of the leading practitioners of St. John, taking an active part in all that was beneficial to the profession.

BIRTHS.

In Montreal, on the 7th February, the wife of Dr. R. A. Alloway of a daughter.

MARRIED.

On Tuesday, the 17th instant, at Christ Church Cathedral, by the Rector and the Revd. Canon Bancroft, D.D., Reid Taylor, Esq., Advocate, to Mattie, youngest daughter of the late Charles Smallwood, Esq., M.D., LL.D., D.C.L.

DEATHS.

In Montreal, on the 15th February, Alice B. Symmers, aged 34 years, wife of Dr. Robert Craik.

At his residence, St. Pascal of Kamouraska, Q., on the 11th February, at the advanced age of 82, James O'Leary, Esq., M.D., after practising his profession for about sixty years. He emigrated to Canada in the year 1818 as Surgeon to one of His British Majesty's regiments. Deceased was father to Dr. P. O'Leary of Montreal; to Dr. James O'Leary, jr., of St. Pascal; and father-in-law to Dr. Rottot of Montreal.

Printed by John Lovell, St. Nicholas Street, Montreal.

Original Communications.

Headaches. Treatment by Guarana by JAMES PER-RIGO, M.A., M.D., M.R.C.S., England, Demonstrator of Anatomy, University of Bishop's College, Montreal.

H. R., a wealthy merchant of this city, suffered fearfully from severe headaches. He was liable to be attacked at any time of the day, and more particularly on those days when business cares pressed more heavily upon him. His digestive organs were in good condition, and had never suffered from constipation nor any of the many different forms of dyspepsia. Among articles of diet, stimulants alone would bring on the headache. He could not read any article, however light and amusing, without immediately suffering. The pain extended over the temporal and occipital regions, and down the neck, not following the course of any particular nerve. Never felt any nausea during an attack. Artificial light of any kind, either in his study or store, caused the pain to be intense, and then he only felt it on the crown of his head. If he bowed his body to pick up anything from the floor, it was as much as he could do to regain the erect posture. Sometimes the pain was so agonizing that he was obliged to lie down from sheer inability to hold up his head. Previous to his coming under my care, he had been leeches, blistered repeatedly behind the ears, had been ordered bromide of potassium, valerianate of ammonia, iodide of potassium, quinine, without deriving even temporary benefit, and he had also given homœopathy a fair trial. At last he was obliged to absent himself from business, when he went to the country for a couple of months and returned much better. A month after re-application to business, the headaches returned, but not so severe as formerly. This was six months ago. Lately, however, their severity has been increasing, and he says they are nearly as bad as ever. A mutual friend advised him to come to me for electrical treatment, and this is the history I elicited from him. Hearing so much about the wonderful effects of guarana in kindred cases, I expressed my wish to give it a trial. He consented, and I prescribed 30 grs. of the powder in water, to be taken when the pain was severe. It acted exceedingly well, completely relieving him of all his headache. At present he can invariably prevent an attack by taking the above dose when he feels the premonitory symptoms coming on. Very little is known, I think, of the actions of guarana further than its

effects in similar cases. My patient tells me, that, shortly after a dose and immediately after the pain is gone, he feels a kind of pleasurable sensation all over, something akin to that experienced by opium eaters.

I have also given guarana to a young lady engaged in giving music lessons with the same satisfactory results. These are the only cases where I have prescribed it. If I should meet with one where this remedy proves of no service, I shall give you the notes of the case.

Correspondence.

To the Editor of the Canada Medical Record.

SIR,—I am a graduate in medicine of one of the leading Universities in the Dominion, and have qualified myself in every possible way for the practice of my profession. A few years ago I settled in the city where I graduated, hoping that in time a share of patronage would come my way. I have acted consistently and professionally, I believe, in all my dealings with my confreres, and so far as I am aware I am on good terms with all my professional brethren. A short time ago, one of the leading medical practitioners in the city where I reside retired from practice, and although asked by nearly every one of his patients whom he would recommend to occupy his place, he declined to make any selection—saying, there were very many good medical men in the place, and that no error could be committed by selecting for themselves. Many sought the services of senior members of the profession and professors in the University of which I am a graduate, but who for various reasons declined to add to the list of their patients. They, however, no longer left the patient free to choose for himself—for their non-acceptance was accompanied with a strong recommendation for them to employ one of two or three names suggested by them. These names were on every occasion those of the junior professors of my Alma Mater. Upon more than one occasion, I have heard that the applicant has ventured to name one or two medical men, outsiders, so to speak, and that although no actual disparaging words were used, the significant shrug of the shoulders which was given was quite sufficient. In this way I know that a prominent member of the profession was deprived of a very wealthy patient. The death

of a much esteemed confrere a year or so ago has caused a repetition of what I have just detailed, and the instances which have occurred within the past few months have been so glaring, and have touched me so directly, that I am compelled in self-defence to protest against such conduct. What right has any body of men, united for the purpose of medical education, to band themselves, to keep within their circle—the chief practice of the city? Is it fair, that a body of gentlemen, composing the Medical Faculty of a University, should so act, as virtually to make themselves enemies towards their graduates? I think not. I feel strongly that the public should have full right to choose their medical attendants, and that medical men already blessed with practices so large, that they are not desirous of extending them, whether connected with a school or not, should not become the champions and *touters*, for a few particular friends. Is it just that in addition to the hard struggle for existence, which is my lot in common with the great majority of the profession, I should have to contend against the influence of those who received my money to teach me my profession. Perhaps I should be charitable. Perhaps, in acting as I have said they *have* acted, they have done so inadvertently—thoughtlessly. If so, I trust that my words, written simply because my manhood rebels against their conduct, will lead them in future to act honorably and fairly to all. As a junior practitioner, I am willing to bide my time. Fair, open, honest professional competition I expect, but the puffing into practice of a favored one or two by those who from age have the public ear is neither fair, just or honorable to the profession at large.

Yours, &c.,

DIOGENES JUNIOR.

Progress of Medical Science.

PENNSYLVANIA HOSPITAL—CLINICAL LECTURE.

By DR. R. J. LEVIE.

VARICOSE VEINS AND THEIR TREATMENT BY SUBCUTANEOUS LIGATION.

Varicose veins are frequently met with among persons whose occupation requires constant standing, and the treatment of them is consequently of importance, as the affection entails much suffering upon the patient, and may incapacitate him from undergoing any physical exertion in the erect position.

The veins of the lower extremity are most liable to become varicose; but the spermatic, the hemorrhoidal, and, indeed, nearly all the veins of the body may suffer in this manner upon the occurrence of any obstruction to the flow of blood through them; for the disease consists in a dilated and hypertrophied condition, dependent upon loss of the function of the valves, by which the return circulation is supported against gravity in a long hydrostatic column.

The affection may be caused by a constitutional tendency, as when the heart by its feeble impulse gives rise to venous engorgement; by check given to the portal circulation from cirrhosis of the liver; and whenever there is pressure made upon the veins, as by the gravid uterus, tumors, or enlargement of the lymphatic glands in the groin. The condition is frequently exhibited by blacksmiths and cooks, who are compelled to maintain the erect posture all day, and are, at the same time, exposed to the heat of the fire; and by those who are given to violent muscular action, thereby pressing the blood from the deep veins into the unsupported superficial ones. In all these cases there is a stasis of blood with increased intravascular pressure, producing dilatation of the veins and consequent insufficiency of the valves, which, by failing to support the column of blood against the action of gravity, cause augmentation of the varicose condition of the veins. The vessels are hypertrophied not only in diameter, but also in length, as is conclusively shown by their convolutions and the tortuous course which they exhibit.

As regards treatment of the affection, the surgeon must be governed by the severity of the symptoms in each individual case, for if the patient suffers very little inconvenience, some palliative measures, as the application of tincture of iodine, or the wearing of some supporting apparatus like the laced stocking, is all that is required; but if the condition is attended with great pain, or complicated by the existence of varicose ulcers, some operative procedure is demanded.

This patient, an engineer, suffers from a varicose condition of the internal saphenous vein, which is exceedingly tortuous and dilated all the way up the thigh, though the trouble is confined to the left limb, which is rather unusual when the affection has attained such a marked degree. He has had also an eczematous eruption, which is not an uncommon complication of varicose veins, and is often quite difficult to influence by treatment; but thus far the patient has been free from the intractable varicose ulceration which so often increases the suffering in varicosity of the veins of the lower extremity. The man has been obliged to desist from work on account of the disease, and has entered the hospital for treatment, which shall be attempted by ligation of the veins subcutaneously.

The most effectual, and at the same time, if properly performed, safest operation for the treatment of varicose veins is subcutaneous ligation, which has been practiced many times in this hospital with complete success, and without any unfavorable symptoms.

The operation is effected by thrusting a straight needle, previously oiled, and carrying a silver wire, across the tissues just beneath the vein; and then after re-entering the needle at the point of exit, the operator causes it to traverse the tissues between the vein and the integument, so that after passing in front of the vessel it is brought out at the first opening. In performing this operation the instrument must be pushed down perpendicularly until it strikes the deep fascia, in order to make sure of getting back of the vein. By this manoeuvre a loop is left protruding at one puncture, with the two ends of the wire coming out at the other, while the vein lies between the two portions of wire beneath the surface. The loop is then drawn in, so as by pressure to approximate the sides of the vessels and cause subsequent agglutination; and the ends of the wire are finally twisted together. If desired, the ligature can be carried above the vein, first by pinching up the skin and pushing the needle horizontally across to the opposite side of the vein, and afterwards returning it across beneath the vessel.

The operation must be performed with the patient in the erect position, in order to have the vein well filled with blood; and ligation is repeated at several points, wherever the vessels are most readily isolated, though it is not unusually necessary to ligate above the level of the knee.

There is often considerable hemorrhage following the punctures, but this is from the dilated capillaries, for with careful manipulation the puncture of the vein is exceedingly improbable. Should this complication occur, however, it might give rise to serious phlebitis from absorption of pus through the orifice in the vein, and might soon be followed by the death of the patient. After the ligature has been in the tissues a week or ten days, it is better to untwist the wire and withdraw it, though if left it could do no harm, but would ulcerate its way out in the course of several weeks.

The after treatment consists in applying adhesive strips over the wound, surrounding the limb with a bandage, and keeping the patient at rest in bed for ten days.

The element of safety in this operation consists in making but slight constriction of the veins, so that their walls are merely approximated by the pressure; and the ultimate division of the vessels being very slowly accomplished, so that the open calibre of the vein is not liable to be exposed to a pus secreting surface or cavity.

Dr. Levis devised this method of subcutaneous ligation of varicose veins with wire, and has practiced it a great number of times, since the year 1859, without any unfortunate result, and without a failure to produce relief.

* * * * *

Two weeks have now elapsed since the operation, without the patient having suffered any inconvenience, and the limb shows no appearance of inflammation or even irritation, while the clot in the veins can be easily felt through the skin; hence the ligature can be withdrawn from the tissues by untwisting the wire, and the man discharged from the hospital.

—*Philadelphia Medical Reporter.*

TREATMENT OF BURNS OF THE HUMAN BODY.

A man having laid down close to a lime-kiln, fell asleep, and being narcotized by the gases escaping from the kiln, had a large portion of his back burned, or rather almost roasted before he was discovered. Cases are often seen where individuals have been anæsthetized by the carbonic oxide and carbonic acid given off from kilns, and severely burned without being aroused; but there are instances which show that men under the influence of alcohol may also be severely burned without being awakened from a drunken sleep; and, indeed, it is probable that this patient was intoxicated with alcohol at the time he was burned.

The prognosis in burns of the human body depends not merely upon the depth to which the lesion extends, but, in as great a degree, perhaps, upon the extent of surface involved, as in a case where a man died in a few hours from having fallen into a brewer's vat, containing water that was not boiling, but only hot enough to produce violent irritation of the skin of the whole body. So also the exposure of the entire body directly to the rays of the sun is said to have been followed by serious consequences, though the heat applied is certainly not intense.

There are varied degrees in the severity of burns. Sometimes they produce merely an irritation of the surface and erythema of the skin, without any blistering or elevation of cuticle; at other times, as when the injury is the result of the application of boiling water or exploding gases, vesication takes place from effusion of serum under the epidermis. Destruction of the superficial layers of tissue may be looked upon as a still higher degree, which occurs when the heat is applied for a longer period than sufficient to produce vesication; as in the case of a boy who sat down in, and became wedged into, a bucket of boiling water in such a manner that he was unable to extricate himself. Then, again, if the intensity of the heat be still greater, the muscles, ligaments, and even the osseous structures are consumed; as occurs not unfrequently in the frightful burns from prolonged immersion of an extremity in molten metals. These degrees of burn may be greatly increased in number, for at best they are but arbitrary; and, moreover, a number of them may be seen at the same time in different portions of the injured surface, as in the patient, where at a peripheral point there is merely erythema, further inward vesication, and at the centre complete charring and sloughing of the integument.

There are on record some extraordinary instances where so called spontaneous combustion of the human body has occurred, by the charring beginning at an extremity and gradually extending over the entire frame. The presence of large amounts of alcohol in the system, and the existence of a large quantity of fat in the tissues, have been assigned as causes for catacausis, as this phenomena has been denominated. It seems to be necessary that the individual be in proximity to fire, and that during intoxication a part of the body be exposed and burned; when the remainder of the body is entirely

consumed by the fat and alcohol in the system supplying fuel.

Patients after having a large portion of the body burned, generally die from shock, as an old woman, seventy years of age, who was admitted to the hospital a few days ago, with one half the body burned from her clothes catching fire. In such cases nothing can be done, except palliation of the suffering by the administration of stimulants and anodynes, and the employment of soothing applications. If they survive the shock, a fatal issue may result, in two or three days, from congestion of some internal organ, as the lungs or brain; in the latter of which conditions they become comatose, presenting symptoms similar to those observed in narcotic poisoning. The occurrence of acute laryngitis, pleuritis, and peritonitis, and enteritis, which are frequently observed after burns, respectively of the neck, chest, and abdomen, is rather a curious phenomenon, since the surface has no direct circulatory communication with the larynx, lungs or abdominal viscera. Occasionally in the third or fourth week, if the patient survive so long, ulceration of the duodenum supervenes, accompanied with vomiting and purging. This result is possibly owing to the additional excretory work imposed upon the intestinal glands subsequent to the destruction of the skin, and the consequent cessation of excretion by that channel.

As regards the treatment of burns, it is necessary to meet the indications presented in the various degrees. If the injury has not extended beyond erythema of the skin, the application of some cooling lotion, as cold water, or Goulard's extract of lead, is all that is required. The preservation of the cuticle is important in the stage of vesication, because the epidermis acts as a bland covering; and therefore the indication is to prevent its cracking, allowing the access of air to the denuded surface. The dusting of flour on the burn, or the employment of a coating of a mixture of flour and molasses, so often prescribed in domestic practice, answers a good purpose by excluding the air and preventing breaking of the vesicated surface. Carron oil, a viscid, saponaceous mixture composed of equal parts of linseed oil, and lime water, adheres well to parts and has a high reputation in these cases. A very good combination is castor oil and carbolic acid; castor oil being perhaps preferable to linseed oil since it has not the exceedingly disagreeable odor that the latter possesses; and the anæsthetic and antiseptic properties of carbolic acid rendering the employment of this agent very beneficial. The solution may be made of one part of carbolic acid to ten of oil, or if the application is to be made to an extended surface, in the proportions of one to thirty or forty of oil. Instead of this, ointment of the oxide of zinc, with or without carbolic acid, can be used; or the part may be covered with moist clay, as Dr. Hewson has recommended in the treatment of burns and ulcers. When, as in this patient's case, the integument has been destroyed, it is necessary to use poultices until the slough separates, after

which emollient dressings are used and continued until cicatrization takes place.

The subject of burns is one of great importance at the present time, for on account of the extensive use of various highly inflammable and sometimes explosive fluids for illuminating purposes, and the application of steam power to every branch of industry, burns and scalds of the human body have become exceedingly frequent, and demand the surgeon's earnest attention, on account of the great mortality and the intense suffering incidental to them.—*Philadelphia Medical Reporter*.

THE MEDICAL TREATMENT OF CHILDREN.

According to Dr. Eustace Smith, of London, the alkalies are remedies of singular value in the medical treatment of young children. In all children, especially in infants, there is constant tendency to an acid fermentation of their food. This arises partly from the nature of their diet, into which milk and farinaceous matters enter so largely; partly from the peculiar activity of their mucous glands, which pour out an alkaline secretion in such large quantities. An excess of farinaceous food, therefore, soon begins to ferment, and an acid is generated, which stimulates the mucous membrane to further secretion. In all chronic diseases, and in many of the acute disorders, this sour condition of the stomach and bowels is present. Alkalies are therefore useful—firstly, in neutralizing the acid products of this fermentation; and secondly, in checking the too abundant secretion from the mucous glands. A few grains of soda or potash, given an hour or two after taking food, will quickly remedy this derangement and remove the distressing symptoms which arise from it. In the chronic diseases, indeed, attention to this point is of especial importance; for by placing the stomach and bowels in a healthy state, and insuring a proper digestion of food, we put the child in a fair way of recovery, and prepare the way for the administration of tonic and strengthening medicines, by which his restoration to health is to be brought about.

In prescribing for infants, an aromatic should be included in the mixture. The aromatics are useful, not only for their flavoring properties, but also for their value in all those cases of abdominal derangement where flatulence, pain, and spasm, resulting from vitiated secretions and undigested food, are present to increase the discomfort of the patient. Such dyspeptic phenomena are usually relieved rapidly by the use of these agents; and aniseed, cinnamon, caraway-seed, or even tincture of capsicum in minute doses, will be found important additions to the prescription in all cases where alkalies are required.

In prescribing for children, the proper dose of a medicine cannot always be calculated according to the age of the child, and does not in all cases bear the same proportion to the quantity suitable for an adult. For certain drugs children show a remarkable tolerance, while to the action of others they

show as remarkable a susceptibility. Thus, opium, it is well known, acts upon a child more powerfully than would be expected, judging from the mere difference of age. It should therefore be given to infants with a certain caution, especially if the child be enfeebled by disease. It is, however, a medicine which is of especial value in the treatment of the diseases of infancy, and may be given without fear if care be taken not to repeat the dose too frequently. Belladonna, on the contrary, can be taken by children in large quantities. A child of two or three years will bear without inconvenience a dose which in an adult might produce very uncomfortable symptoms. It is important to remember this in giving belladonna for its sedative effects, as in whooping-cough. Lobelia, again, is a remedy which is very well borne by children. Dr. Ringer has given it to "very young children" in doses of five minims every hour, and in no case has he noticed any ill effects to follow its administration. Arsenic should be given to children over five years of age in the same dose as that used for adults, and infants a month or two old will take one drop of Fowler's solution three times a day with great benefit in cases of gastric catarrh. The influence of mercury upon young children deserves remark. It seldom in them produces stomatitis or salivation; but an excess of the drug is not therefore harmless: its influence is seen in the irritation of the alimentary canal which it so often excites, and in the profound anæmia which it induces.—*Boston Journal of Chemistry.*

ON THE TREATMENT OF ENLARGED SCROFULOUS GLANDS.

By J. LEWIS SMITH, M.D.

(*Treatise on the Diseases of Infancy and Childhood*, 2nd edition, London and Philadelphia, 1872.)

"It is the common practice," Dr. Smith writes, "to treat these glands, if they are subcutaneous, by daily application over them of the officinal tincture, the compound tincture, or the compound ointment of iodine. It is my opinion, from observing the effects of these agents, that they are too irritating for ordinary cases. Applied daily, they cause proliferation of the cells of the epidermis, so that in two or three days the thickening of the cuticle is greatly increased, and its external layer begins to exfoliate. It has appeared to me that what we observe in the epidermis illustrates, to a certain extent, what occurs in the gland underneath, as a result of active counter-irritation. The gland does not resolve, its superfluous cells are not destroyed and absorbed, as was desired, but the treatment tends rather to increase the proliferation of the cells of the gland or the formation in it of true leucocytes. We have seen that a local cutaneous inflammation, as eczema or impetigo, is apt to cause the neighboring lymphatic glands to enlarge. How, therefore, can we expect to reduce a glandular swelling made by a mode of treatment which establishes a similar condition? 1 once produced, partly by accident,

such an amount of vesication over an enlarged, hard, and apparently somewhat indolent gland, in an infant of fourteen months, that for a week I was very anxious lest a sore would result, which would heal with difficulty, or leave a permanent cicatrix, and yet, instead of dispersion of the glandular swelling, the pathological processes were so promoted that suppuration and discharge of pus occurred by the time that the cuticle had re-formed. If hyperplasia of the lymphatic gland could be cured by counter-irritation, it should have been in this case.

"The correct mode of treating these glands, therefore, as regards external measures, I hold to be, to apply the iodine preparations in such a manner that the largest amount of iodine will reach the glands by absorption, with little irritation of the skin. I am not prepared to state what is the best formula for the application of this agent. During the last few months we have been attempting to determine this in the children's class at the Out-door Department at Bellevue, but our statistics of cases are not at present sufficiently complete or numerous to enable me to make a positive statement. I feel justified, however, from the observations already made, in recommending the following formulæ as preferable to the officinal preparations which are commonly employed; R. Potas. iodidi, ʒj; ung. stramonii, ʒj; misce; to be rubbed over the gland several times daily. It should not be applied as a plaster, as it is too irritating and will vesicate. I have known a glandular swelling, which had continued about three months, to disappear in as many weeks under its use in connection with internal remedies. Glycerine may be employed in place of stramonium ointment."

DIARRHŒA IN TEETHING.

By FRANCIS MINOT, M.D.

(*Boston Medical and Surgical Journal*, January 2.)

In a clinical lecture "On the Primary Dentition of Children," by Dr. Minot, in speaking of the diarrhœa complicating teething during hot weather, he recommends the common chalk mixture, with the addition of one-fourth part of tincture of kino, which increases its astringency, and also keeps it from turning sour in hot weather. If the diarrhœa be not checked by this mixture, one drop of laudanum may be added to a dose, but not oftener than three times a day, in children under two years old. Diarrhœa is most apt to attack children who are brought up on the bottle; hence, if the case be urgent, and do not yield to treatment, a wet-nurse should be procured if possible. When this cannot be done, he would strongly recommend the method of preparing the milk with arrowroot and gelatine, found in the treatise on "Diseases of Children," by Drs. Meigs and Pepper. Brandy is very useful to a teething child exhausted by diarrhœa, which should be given once in three or four hours, or oftener in urgent cases. The doses is ordinarily from five to twenty-five drops, given in milk; but if there be much prostration, the physician need not fear to increase the amount.

ON THE IMPORTANCE AND DANGERS OF REST IN PULMONARY CONSUMPTION.

An interesting paper on this subject, by Dr. Berkart, has drawn from Dr. Horace Dobell a communication on this topic, which appears in *The British Med. Jour.*, of Nov. 22. He says: "The rules for the cautious application of localized rest in lung-diseases which I recommended, as dictated by a consideration of the nature of tuberculosis, and justified by the results of my own practice, are as follows:

"1. If one lung, or a portion of one lung, or a portion of each lung, has become diseased, under circumstances which make it certain that there is no constitutional cause of lung-disease, then it is safe to secure localized rest for the diseased part, and to throw the extra work upon the sound parts; but even then it is necessary to be cautious that the extent of the lung so rested is not too large in proportion to the extent of sound lung upon which the extra work is thrown. If there is any question about this, rest of the whole body must be secured in addition to the localized rest of lung, so as to save the sound lung from as much work as possible.

"2. If there is a constitutional cause of lung-disease, but only a small area of lung at present suffering, and that on the upper lobes, while there is a capacious chest with large areas of lung in the lower portions quite sound and insufficiently used, then it is safe to secure localized rest for both upper lobes, and to make the lower portions do a fairer proportion of work; but even under these circumstances the respirations should be kept at as low a point as practicable.

"3. If a portion of lung has become disintegrated, under the influence of constitutional causes, and remains obstinately unhealed after all constitutional symptoms have been arrested, and, for some time past, no other portions of lung have shown a tendency to yield, then I think it is quite safe to secure localized rest for the disintegrated portion, so as to give it a fairer chance for healing; while an amount of air and exercise may be allowed to the patient, for the purpose of improving his reparative powers, which could not have been permitted while the damaged lung was exposed to the same amount of action as the sound parts. But even here the utmost caution is required not to carry the exercise beyond a very limited amount.

"4. If the constitutional tendency to lung-disease—the abnormal physiological state—is strong, and signs of impending mischief in the lungs are scattered, no localized rest should be attempted, but every means should be brought to bear upon the important object of maintaining respiration at its lowest point consistent with life and nutrition, until the constitutional tendency has become passive and the local symptoms have been removed.

"In conclusion, to prevent misapprehension on so vital a point, let me remind my readers that, in urging 'the importance of rest in consumption,' I am referring to cases in which the lungs are already damaged, or in which the constitutional disease has

declared itself in sufficient force to render tubercularization imminent. If the symptoms are only what are commonly called premonitory, that is, if they are those of commencing tuberculosis, and no reason or sign is discoverable which justifies the suspicion that tubercularization has commenced; if a sufficiency of fat remains without calling upon the albumenoid tissues, the principles of treatment are quite opposite to those detailed."

ANTICIPATION OF POST-PARTUM HEMORRHAGE.

Dr. Ewing Whittle maintains (*Brit. Med. Journ.*, Sept. 27, 1873) that post-partum hemorrhage may be diagnosed beforehand by the peculiar pains during parturition, and being diagnosed may be prevented. The peculiarity of these pains is that they are "strong and quick; they do not gradually culminate into a strong pain and subside again, but they are sharp, quick, and cease almost suddenly; and the intervals between the pains are long in proportion to the length of the pains. In an ordinary case, for one or two hours before the completion of labor, the intervals will average about three times the length of the pains; i. e., if the pains last each from fifty to sixty seconds, the intervals will average a little less than three minutes. Now, if the pains last each only from forty to fifty seconds, and are of the sharp character I have described, with intervals lasting five or six minutes, though the labor may proceed steadily and the head advance a little with every pain, you will be sure to have hemorrhage after delivery is completed, unless you anticipate it by altering the character of the pains, in making the pains longer and the intervals shorter. It is very easy to understand how this comes to be the case; the uterus is contracting sharply, and then becoming fully relaxed; after the child is born, a relaxation follows: one or two sharp pains expel the placenta with a gush of blood, and the uterus again relaxes, continuing the same tendency which existed before the delivery of the child."

In such cases Dr. W., as soon as the os is dilated, gives a full dose of ergot, and if this does not improve the character of the pains at the end of an hour he repeats it. "In dealing with primiparae, caution is required, first, not to administer ergot until the soft parts are pretty well dilated as well as the os uteri; and the drug should be administered in much smaller doses, as it sometimes acts with unusual energy in primiparae. Generally, in about twenty minutes or half an hour after the ergot has been administered, the pains increase in length and frequency, and when the labor is over, the uterus maintains a good contraction. The ergot which I use is a liquid extract twice the strength of that of the *Pharmacopœia*, of which I give a teaspoonful when I think a full dose is indicated.

"I have pursued this practice now for more than twenty years. During this time I have attended 3,750 labors, and among them I have had one case of post-partum hemorrhage; that case occurred about three o'clock one winter's morning, when I happened to have no ergot with me."

ON THE PATHOLOGY AND TREATMENT OF HEAT APOPLEXY.

By A. R. HALL, Assistant Surgeon, Royal Artillery.

The article on this subject, by Assistant Surgeon Candy, M.D., 109th regiment, published in the *Indian Medical Gazette* for July, recommends a plan of treatment which it was to be hoped had been given up as worse than useless by those who had had experience of this disease. Blood-letting tartar-emetic, and other lowering remedies have been attended with such disastrous results, that I may say hundreds of medical men condemn their use. I attended the first course of lectures on military medicine, delivered by Dr. Maclean at Fort Pitt, Chatham, in the summer of 1861, and I well remember the earnestness with which he implored us *never* to bleed in sunstroke.

While I was at Barrackpore, I treated several patients on the plan mentioned to me by my friend, Dr. W. K. Waller (and *first* recommended by him to the profession); and his own papers in the *Indian Medical Gazette*, together with several others, showing the success attending the exhibition of quinine in large doses in this disease, either by mouth, or hypodermically, surely ought to induce every medical man to give it a trial, and not *go back* to the old plans, which have been proved to be fatal in the end.

Dr. Candy's proposed treatment seems to me to be the more deplorable, because he places among several *pre-disposing causes* (which are probably true) what I think can be proved to be the *actual pathological condition* in heat apoplexy, viz., exhaustion, with depression of the nervous system.

The subject of increased heat of body has been latterly attracting much attention at home. In the *Lancet* for 3rd February, 1872, there is a special article on "heat" under the head of "Therapeutic Traditions." I beg strongly to recommend it to the notice of all medical men who have not seen it. I should like to make a good many extracts, but, as they would occupy too much space, I confine myself to a few. After stating that the old idea was, that the special sign of the sthenic character of disease was the excessive development of heat, the writer proceeds:—"An entirely new order of conceptions has been necessitated by modern discoveries, dating mainly from the more accurate researches on the relations of tissue-waste to the production of heat, and from the improved knowledge respecting the heat-regulating functions of the nervous system." "For the old idea, that sensible heat of skin with redness of the face in itself implies strength of constitution, no authority remains; the obvious fact being that surface redness means *vasomotor paralysis*, and that high temperature in partially protected regions like the axilla means simple tissue waste, as already described. The only thing which might remain unchanged is the belief that extreme *pallor*, and especially extreme coldness of the surface, under circumstances of general pyrexia, are signs of really severe depression. No doubt that is so, but the reason for so considering it is, that this

pallor and coldness of skin, under circumstances where there is necessarily the minimum of contractile resistance in the small arteries, implies that the heart has too little force to pump the blood to the surface in any considerable quantities. But this is only a phenomenon of extreme cases." It is observed in those rapidly fatal cases of sunstroke, occasionally, where death by syncope kills in a few minutes.

The writer concludes his article thus:—"Broadly speaking, the indications from excessive heat of body ought now to be interpreted in exactly the opposite sense to that in which they were formerly read. Whereas they used to be supposed to show that the case was a sthenic one, we now consider them almost absolute proof that the reserve forces of the body are exceedingly low, and are being constantly and rapidly reduced. Only let us think of that fact, and then remember the fashion in which multitudes of practitioners still talk of 'hot skin,' 'bounding pulse,' and so forth, as evidences of strength; and we must admit that the advanced pathology of the day is not merely somewhat ahead, but is altogether out of sight, of a large part of the less observant and less reflecting sections of the profession."

Dr. Candy writes of the "enormously increased temperature of the body, *dependent* upon the accumulation of carbon in the system;" but I think we have evidence to prove that the accumulation of carbon depends on the non-oxygenation of the blood consequent on the congested state of the lungs, one of the direct effects of nervous exhaustion, which exhaustion also causes the high temperature.

No one, I think, will doubt that Dr. Candy gives the true *exciting causes*, particularly "the suffocating atmosphere," which, I believe, is the principal cause of the great depression of the nervous system.

But with regard to Dr. Candy's indications for treatment; he recommends "free venesection to 20 ounces or more, to relieve the congested condition of the heart and lungs." But if this congestion depends on nervous exhaustion, as I think the writings of Dr. Brown-Séquard and others prove, what good is really done by bleeding? In some cases the abstraction of blood has, for a time, removed the *mechanical engorgement* of lungs and brain; but look at the enormous mortality following this treatment! The exhausted nervous system is further weakened. If, however, a nerve tonic is given, the congestion is removed by the *invigoration* of the nervous system.

He next recommends "to get the skin to act freely by the use of tartar-emetic," &c. In the *Lancet* for 17th February, 1812, another special article on "cooling" remedies appears under the same heading. In it occurs the following:—"But that diaphoresis, even in its most copious form, will necessarily relieve a severe fever-heat, is shown to be transparently false by the phenomena of rheumatic fever, and of relapsing fever." Even if copious sweating was induced, while the *cause* of the burning skin—viz. the nervous exhaustion—was not ameliorated, no real benefit would ensue.

In the article just quoted from, and in another on

the same subject in the *Lancet* for 6th April, 1872, the old notions that "blood-letting cooled, and that alcohol heated," are overturned.

I think that all the well-known symptoms of heat apoplexy are produced by *intense nervous exhaustion*, and that it is a pathological condition closely allied to the *secondary fever* of cholera. I have seen the utmost benefit result from the hypodermic injection of quinine in insolation, where actually moribund patients have been saved by it. I would employ the same remedy in the *secondary fever* of cholera. In the number of the *Indian Annals of Medical Science* for March, 1870, I brought forward the theory that in the *collapse* of cholera there is very great *irritation* of the sympathetic nervous system. I recommend for that condition the hypodermic injection of pure sedatives. The cold douche over the head and body, or the cold bath lately recommended by Dr. Wilson Fox, in hyper-pyrexia, with auxiliaries, as stimulating enemata, counter-irritants to head and chest, have been proved to be of great value; but they often fail. I think that in the hypodermic injection of quinine we have the remedy for heat apoplexy: and I hope that medical men in India will follow Dr. Waller's advice, and try it extensively.

Dr. Manassim, and other physiologists on the Continent, are carrying out experiments to prove the *modus operandi* of quinine. Whatever effect it may have on the blood corpuscles, it certainly braces up the nervous system in a wonderful manner; and it is this action which I think makes it of such value in insolation. I venture to say, that if medical men try it in a few cases, they will soon be convinced of its immense value in sunstroke. But, for goodness sake, at all events, don't let us revert to bleeding.

Dr. Candy in concluding his paper, writes:—"The after treatment must be left to the discretion of the medical attendant." It is sincerely to be hoped that the discretion of the medical attendant will not allow him to employ either venesection or tartar emetic in heat apoplexy. If he *does* use them, probably there will not be much *after treatment* required.—*Indian Medical Gazette*.

CAUTERIZATION OF THE UTERINE CAVITY.

We transcribe the following from the *Lyon Médical* for December, 1873:—

Dr. Blanchard (thèse pour le doctorat, par M. Joseph Blanchard, Paris, 1873) belongs to the school of those gynecologists, who in uterine affections attribute much to the body of the womb. He does not admit with Bennet that metritis of the neck is the rule and metritis of the body the exception. He shows, on the contrary, that the inflammation, fungosities, and ulcerations are most ordinarily found in the mucous membrane which lines the cavity of the body. Therapeutic means addressed only to the lesion of the neck are completely insufficient. This disease must be followed to the superior orifice of the cervical cavity.

Among the means to this end, M. Blanchard has specially studied astringent and caustic injections, painting the internal face of the body by means of a brush dipped in nitrate of silver or other solutions, and above all by means of medicated pencils introduced into the womb. Among injections he mentions those made with decoction of oak bark, tincture of iodine in water, iodide of iron, perchloride of iron, and glycerine. The author says that after this practice he has unhappily seen a certain number of cases of peritonitis develop. These accidents are not due to the passage of some of the injection into the tubes. The experiments of Vidal de Cassis, of Klemm, Petit, and Astros, have shown that the penetration of the injection into the peritoneal cavity is nearly impossible in the conditions in which intra-uterine injections are made. The peritonitis is due to the presence of peri-uterine inflammatory centre, which is lighted up by the impression produced on the uterine mucous membrane. One is protected from such accidents by carefully exploring before the operation all the points of the true pelvis, and by abstaining every time one discovers the least trace of peri-uterine inflammation. That is a formal contra-indication which, moreover, is common to two other means of medication which Dr. Blanchard passes in review.

Painting the uterine mucous membrane is done by means of a canula which is placed in the cervical cavity, and through which the brush is passed.

M. Nonat and M. Courty are able in this way to paint the whole cavity of the uterus with astringent or caustic solutions, tincture of iodine, or nitrate of silver.

The introduction of medicated pencils into the uterine cavity has most particularly fixed the attention of M. Blanchard. MM. Becquerel and Rodier have employed long pencils composed of gum tragacanth, mixed with alum, sulphate of copper, sulphate of zinc, or tannin. This last substance alone has given good results.

Recourse has been had to pencils of nitrate of silver. But the caustic which M. Blanchard prefers is a mixture of nitrate of silver and nitrate of potash. These are the pencils which he has seen used in the service of M. Laroyenne. He describes with care the operative proceeding precautions of the able surgeon of La Charité. He establishes the indications and contra-indications of this method of treatment, relates six cases of cure obtained in cases of chronic metritis, and terminates his interesting work by the following conclusions:—

1. Introduced into the uterine cavity, the pencil of nitrate of silver and potash is a completely infensive agent.
2. It may be left in the cavity if it be necessary to profoundly modify the mucous membrane.
3. Its employment is formally contra-indicated in all inflammatory states of the uterine annexes, or adjacent tissues.
4. Its application has been followed by cure in cases of abundant leucorrhœa, chronic metritis of a hemorrhagic character, and occlusion of the internal orifice of the neck with retention of the secretions.

5. In the case of metritis developed under the influence of a fibroma or deviation of the uterus, it gives marked ease, and often causes the disappearance of the greater part of the symptoms: but not acting on the cause, it does not save the patient from relapses.

CORNS.

Serape a piece of common chalk, put a small portion of it upon the corn and bind it with a linen rag. Repeat the application for a few days, and you will find that the corn comes off like a shell, and perfectly cured. The cure is simple and efficacious. Mr. Wakely, in the Royal Free Hospital, London, is in the habit of applying glycerine to corns. It softens its excrescences that they may be scooped out with ease.

NEURALGIA IN INFANTS.

Children from two to six weeks old, especially males, suffer frequently with attacks of pain in the bowels, coming on about midnight, and lasting until four or five in the morning. Children thus affected cry violently, but towards morning become quiet, fall asleep and the next day are well as ever. This enteralgia does not seem to be caused by any faecal accumulations; it is very noticeable, however, that during the paroxysm they pass no water, and at the end of it a large quantity of pale coloured urine comes away, as after an hysterical attack. The cause of this retention of urine is unknown. The disease affects children of all classes of society, indiscriminately, without reference to their hygienic condition. The remedy recommended by Dr. Boyd (*Edinburgh Medical Journal*, Feb., 1873; *Schmidt's Jahrbucher*, 1873, No. 2) is spiritus ætheris nitrosi, eight or ten drops in a drachm of water. Immediately afterwards, with escape of wind and the passage of a considerable quantity of urine, the crying ceases, and the little patient goes to sleep.

CONVULSIONS CURED BY AN INJECTION OF ATROPINE AND MORPHINE.

M. le Docteur Divet treated attacks of convulsions in a lady who was confined naturally the day before. The urine was not said to be albuminous, but the gravity of the symptoms left no doubt as to the nature of the disease. M. Divet injected hypodermically 1 gr. 50 centigrs., or about one-sixth of the following solution:—atropiæ sulph. grain $\frac{1}{16}$, morphiæ acet. grain $\frac{1}{4}$, aquæ 5 ij. This injection of or about one-tenth of a grain of atropine is very powerful, but the doctor trusted to the antagonistic action of the morphia to moderate its energy, giving it at the same time, though in a comparatively smaller dose. The patient awoke after a sleep of seven hours free from the attacks, which did not return. The next day there was slight convulsive movements, without loss of consciousness. During the following days

the dryness of the throat caused by the atropine was the only symptom to be noticed. The result of this treatment deserves recording; but it would be prudent to divide the doses of atropine, and to see how the remedy is borne—*Gazette Obstet.*

TREATMENT OF TINEA CAPITIS.

M. Bourbier recommends as one of the most successful applications in this troublesome affection the use of carbolate of soda, the head to be first completely cleansed, the hair clipped closely, or shaved, and then a pomade containing this substance in various proportions to be freely applied.

TREATMENT OF HOOPING-COUGH.

Sir,—For a long time I have used with great success a mixture composed of chloral hydrate, 18 grains; dilute nitric acid, 25 minims; ipecacuanha wine, $1\frac{1}{2}$ drachms; syrup and water, $1\frac{1}{2}$ ounces. The dose for a child from two to four years old is a teaspoonful every three or four hours. If the tongue has been furred and the bowels disordered, I have substituted carbonate of soda and nitrate of potash for the nitric acid, and have given a dose of rhubarb and grey powder at bedtime. Some years ago, I was in the habit of using tincture of belladonna, but much prefer the above formula.

I am, etc.,

JAMES CROCKER.

British Med. Journal.

Bingley, January 23rd.

BELLADONNA PLASTER IN VOMITING.

Apropos of belladonna, it appears useful to say a word on the application of this substance in the form of a plaster in vomiting as a symptom.

This year, at a meeting of the Therapeutical Society, Dr. Guéneau de Mussy has treated this practical point with some developments. The honourable clinician of the Hôtel-Dieu, has recalled the fact that Bretonneau prescribed the application of belladonna plaster in vomiting, but only in the incoercible vomiting of pregnancy. The eminent physician of Tours put the plaster on the hypogastrium, wishing to act on the uterus; which provoked, according to him, vomiting by reflex action. Cazeaux also has recommended belladonna in incoercible vomiting of pregnancy. He placed the drug on the cervix uteri. He reported many successes thus obtained. Bretonneau and Cazeaux are, then, the inventors of the method: but it belongs to Dr. Guéneau de Mussy to have generalized it: and in effect, for twenty-five years he has extended it to the symptom of vomiting, whatever its cause.

Among the cases in which this topical application has given unexpected results, Dr. Guéneau de Mussy cites that of a patient in whom the habit of vomiting had existed forty years. The same physician suggested the idea of prescribing it as a prophylac-

tic and curative of sea-sickness. A young lady who could never put her foot on a vessel without being tortured with sea-sickness, was able by this means to make a voyage to Australia without being seriously inconvenienced.

Dr. Guéneau de Mussy cites also the instance of a noble foreigner who was instantly relieved by the application of the same remedy. Related by a physician of authority such as Dr. Guéneau de Mussy is, these facts are very interesting, and should not be lost sight of.—*Journal de Médecine et de Chirurgie*, Novembre, 1873.

CHLORATE OF POTASH TO PREVENT SALIVATION.

Dr. Dodge says:—It has been my practice for the last three years to administer the chlorate of potassa in connection with a mercurial, whenever I desired to give the latter for any length of time. I do not administer the chlorate at the same time that I do the mercurial, but at longer intervals, and nicety of dose is immaterial; a small quantity is sufficient. I cannot see but that I obtain the therapeutical effects of the mercurial as readily as before I gave the chlorate. In secondary and tertiary syphilis I have employed the same agents with similar results.

But still more in active inflammation, when I have given repeated doses of calomel at short intervals, with an occasional dose of the chlorate, I have obtained the desired effect of the calomel, but never produced the slightest symptoms of ptyalism.—*Transactions of the Minnesota State Med. Society*, 1872.

STYPTIC COLLODION.

The following will be found a most useful formula:

Tannin,	2 oz.;
Alcohol,	4 oz., fl.;
Ether,	12 oz., fl.;
Soluble cotton,	1 drachm and 2 scruples;
Canada balsam,	1 drachm.

Dissolve the tannin in one part of the alcohol, and the ether with the Canada balsam; then add the cotton.—*Dublin Medical Press and Circular*.

LAXATIVES.

A new remedy has been introduced as a laxative which is said to be preferable to many of the salines, on account of its agreeable taste. It is the sulphovinate of soda in two drachm doses.

Another very efficient and much used laxative compound is the following:

R	Ext. colocynth, co.	gr. vi.
	Ol. caryophyl,	gtt. ij.
M.	Divide in pilule No. ij.	

LIQUOR PICIS ALKALINUS.

The following preparation is that of the late Dr. H. D. Buckley, of New York, who proposed it to fill the place of a secret French preparation of tar:

R.	Picis liquidæ,	3 ij.;
	Potassæ causticæ,	3 j.;
	Aquæ,	3 v. m. ft. sol.

This mixes with water in all proportions, and discolors the skin to a very moderate extent. It dries rapidly, and leaves very little stickiness. He has used it in all degrees of strength, and regards it as one of the best methods of employing tar. The potash heightens the anti-pruritic effect of the tar. The solution he has employed with advantage in eczema, both in its chronic stage with thickenings, and in the more acute forms, where exudation has about or nearly ceased and the itching is intense. In chronic cases with infiltration, it may be used in full strength. Good success has followed its use in lupus-erythematosus and psoriasis.

THE TREATMENT OF SYPHILITIC WARTS.

Dr. Prohsch, as quoted by the London *Medical Record*, has abandoned in all cases the excision and cauterization of pedicled warts as needlessly painful. He ties them with soft and tolerably thick silk or cotton thread, tight enough to strangle without cutting them. He takes special care to place the ligature close to the root, but not to include any true skin. When the warts are short and stumpy, he draws the noose home, but, before tightening, pushes it down around the root by means of a pointed stick. When the warts are large or compound, he places a separate thread around the several portions, being careful never to include a large quantity of tissue in one ligature. If the warts be very soft, or secreting matter freely, he dresses them for a day or two with cold lotions, so as to check the irritation before the ligature is applied. If they be situated within a phimosi, he uses injection freely, and ligatures all the warts within reach, getting hold of deeper ones as the swelling subsides and the prepuce can be folded back, until all are removed.

Warts that are too flat and broad to be included in a ligature must be cauterized by chemical or actual caustics; but where caustics are used, the greatest care must be taken to keep the surfaces quite clean and dry, lest they suppurate and troublesome abscesses form. Before applying caustic, the warts should also be carefully washed, and then dried by dabbing with cotton-wool. He recommends for soft succulent warts a weak solution of chloride of iron, or powdered alum and tannin; for hard dry warts he prefers strong nitric acid to all other agents. These applications, if used to only a limited amount, cause no irritation, and can be repeated every two or three days till the warts waste away.

CAPILLARY BRONCHITIS.

(This essay embraces some of the views of Roberts, Aitken, and Niemeyer.)

The older writers called this disease capillary or suffocative catarrh, a name which we think eminently judicious, as it not only gives the anatomical seat and nature of lesion, but also gives the lesion of function. It is usually an acute affection, though sometimes found in a chronic form in the aged. It may present simple hyperæmia, or may be of the catarrhal or croupal form; the catarrhal giving cells, mucus, pus, etc., and the croupal giving fibrinous elements.

The causes may be predisposing and exciting. The predisposing are:—

1. *Age*.—More common in infants, especially during dentition, and in the aged.

2. *Habits*.—Over-heated rooms, over-wrapping, and too much coddling are favorable to its production.

3. *General Health*.—Weak and enfeebled persons, diabetes, Bright's disease, scrofula, gout, rheumatism, etc.

4. *Weak Lungs*.—Tubercular deposits, cancer, etc.

5. Obstructed circulation, as in heart disease, ascites, etc.

6. *Occupation*.—Those exposed to heated rooms and cold draughts, exposed to wet and cold out of doors; knife, scissors, and steel grinders; workers in cotton, charcoal, etc.

7. *Climate*.—Damp, cold, fickle or changeable climates predispose to bronchitis.

8. *Season*.—Fall, winter and spring, in bad weather and inclement seasons.

9. More prevalent in large towns, etc.

The exciting causes are:—

1. Exposure to cold and moisture, and more especially if the patient has already a bronchial catarrh involving the larger tubes.

2. Inhalation of irritant gases, and of dust from steel, cotton, charcoal, etc.

3. Morbid blood conditions, as measles, typhoid fever, scarlatina, small-pox, gout, and rheumatism.

4. Sometimes epidemic, as during influenza.

Symptoms.—These vary somewhat, according to the amount of bronchial surface involved, and also to the previous condition of the patient. If not very decidedly extensive, they are usually as follows:—

1. Shiverings, chills, etc., repeating themselves even during the rise of fever, headache, nausea.

2. Comparatively little pain at first, but an incessant dry, rasping cough.

3. Whistling, wheezing, sibilant rales.

4. Dyspnoea, but no dullness on percussion.

5. Rapid respiration, anxiety and restlessness.

6. Expectoration at first scanty, clear and viscid; afterwards more free, opaque, whitish or yellowish. If a large surface in each lung be implicated, the dyspnoea is excessive, and the restlessness and anxiety very marked, while the respiratory efforts are rapid and laborious. The face often indicates great terror and intense distress, and in children this sometimes amounts to an agony of fear. After two or three

days there are muscular pains from straining in the violent paroxysms of coughing.

The shiverings, fever, dyspnoea, dry cough, rapid respiration, sibilant rales, clear percussion, etc., are the symptoms most reliable for diagnosis. The restlessness and distress are also of value. The absence of any great amount of pain, and the presence of the harassing paroxysmal cough in pure capillary bronchitis are remarkable, and can only be explained on this ground, viz: the afferent nerves, conveying impressions to the nerve centres, do not belong to the class which transmit the sensations of pain, but form one portion of a physico-reflex arc, and the impressions received are transmitted to the nerve centre and a motor influence at once reflected back, which motor element we recognize as the muscular effort of coughing. Nature has here wisely protected these minute tubes from occlusion by tenacious secretions, and from obliteration by adhesive inflammation of the walls; the violent and convulsive efforts are, therefore, to a great degree conservative against obstruction of calibre, though if in too great excess, they are exhausting and injurious. It is evident, therefore, that the most delicate of all therapeutical questions will be, "*when and how far to control this cough by anodynes*;" and keen must be the observation of the practitioner, and shrewd his judgment, when in a severe case he desires to save his patient from the exhaustion of the cough, and at the same time avoid the great danger of obliteration of a large space of breathing surface, by permitting capillary occlusion from retention of secretions. If it be true, as stated by a high authority (Draper, p. 159), that each terminal bronchus has 20,000 air cells attached to it, and that there are 600,000,000 of these air cells in the lungs, we can readily appreciate the danger, in the case of extensive bronchitis, of the obliteration of the calibre of these tubes, even though the diameter be not more than from 1.50 to 1.10 of an inch, for such obstruction must cut off a large area of breathing and hasten asphyxia. And this is more particularly true of children too young to expectorate and thus relieve the tubes of this obstructive mucus, pus, or croupal formation, and yet whose impressible nervous systems render the incessant cough one of the most prominent and annoying symptoms. In several cases seen in the last few months, there appeared almost an absence of pain (except from muscular soreness), while there was a most marked and aggravating cough, continuous even during sleep, and recurring each day or night in paroxysms so distinct as to lead to a strong suspicion of complication by malaria. The bronchial membrane appeared almost in a state of anaesthesia as regards pain, but excessively active as regards reflex impressions resulting in motor impulses. Emetics demonstrated the croupal element in several of these cases.

Dangerous Symptoms.—When a very large area is involved, when the secretions are very fibrinous or croupal, when the patient is feeble or has a chronic disease of the lungs or heart, when a fresh attack from exposure complicates an already uncured attack of an extensive character, and when the patients are very young or very vulnerable children, we have often

arising symptoms of a most dangerous import. These symptoms are apt to give to be of two kinds: 1. Those indicating an overwhelming of the nervous system; 2, those indicating approaching asphyxia.

1. *Nervous Elements*.—There is usually excessive cough, high fever, great headache, loss of sleep, intense restlessness, dry tongue, rapid pulse, then delirium or convulsions, coma and gradual death, preceded by profuse perspiration from paralysis of the muscles of the skin, and extensive bronchial rales from paralysis of organic muscular fibres of the lesser tubes, causing retention of the secretions.

2. *Asphyxia*.—In the other class of cases the approach of asphyxia is seen in the violent efforts at respiration, the perpetual restlessness, the quivering nostrils, the paling lips, the bluish fingers, the general cyanotic appearance, the cold, clammy sweat, the falling temperature, the often gradual drowsiness, cessation of all cough, with bronchial rales and the death rattle. Niemeyer says that impending danger in the capillary bronchitis of children may be often foreseen from the following symptoms: 1. Sinking in of the epigastrium and of the hypochondriac regions, showing that the air cells are being exhausted and not refilled, owing to obliteration of calibre of tubes by retained secretions, etc.

2. Increased and permanent prominence of the supra and infra clavicular regions, showing that air is being forced into these air cells, but does not return, i.e., there is not the normal interchange between the air in the cells and the external atmosphere. So we shall find a species of permanent collapse at the basis of the lungs, and a condition of permanent distention at the apices. In each case normal respiration is not performed, and impending danger is to be dreaded. In the collapsed condition air fails to enter the cells; in the distended condition both air and carbonic acid fail to leave the air cells.

Bronchial catarrh of new-born children, Niemeyer thinks, is often mistaken for organic disease of the heart, as the cyanotic symptoms come on rapidly, from the fact that the child does not cough, and the imperfect development of the muscles of the chest and bronchial tubes permits rapid occlusion of many tubes, and rapid asphyxia by obliteration of the breathing surface.

Duration.—It is an acute disease, and will run its course in from five to twenty-one days—rarely over a month. In fatal cases death occurs in children usually between the fourth and tenth days; in adults, between the eighth and fourteenth days. Some cases are much more rapidly fatal. Children often die on the second or third day. The Emperor of Russia died (during the Crimean war) within, I think, 48 hours after the exposure which induced a relapse. Rarely does this form become chronic, but it sometimes lays the foundation for emphysema, and, according to Niemeyer, galloping consumption.

Diagnosis.—The diffused character of the chest sounds, the absence of dullness, crepitant rales, rusty sputa, a pain (never acute), the continued shiverings, the dyspnoea, restlessness, and the incessant cough are usually sufficiently characteristic.

Prognosis and Mortality.—It is a grave lesion,

and the prognosis depends upon many elements. It is grave (1), if the disease be very extensive; (2), if in the very young or very old; (3), in feeble and delicate persons; (4), if it should complicate chronic heart or lung trouble; (5), if the sputa be very excessive and very tenacious, and symptoms of asphyxia threaten early; (6), if intercurrent disease complicate it.

The Morbid Anatomy shows diffused redness—arborescent redness—evidences of congestion; a swollen and thickened membrane; softened and abraded membrane; inflammatory products: if a recent case, scanty and tenacious mucus or fibrinous patches: if of longers tanding, mucus-pus fibrin, detached epithelium, exudation corpuscles, coagulated blood, occluded tubes and portions of lungs with air cells collapsed, and other portions with air cells distended from air retained by the occlusion. Occlusion during expiration would give collapse; occlusion directly after inspiration would give distention simulating emphysema.

From the morbid anatomy we can at once deduce the pathology as being almost certainly an inflammatory affection of the lesser bronchial tubes, involving the mucous membrane primarily; and important as it interferes with the function of respiration. It occurs from checked perspiration, direct action of cold on the membrane, or by extension from the larger tubes; or from the poisons of other diseases, as measles, typhoid fever, gout, rheumatism, smallpox, malaria, etc.; or caused mechanically by direct irritants, as steel, iron, coal dust, etc.

Treatment.—If, upon a careful examination of the patient, the cause be found to exist as a continuously operating one, it should, if possible, be removed. Under this head, irritant dusts, cold draughts, damp and cold working rooms, continuous flowing of saliva upon the breasts of children, going from an overheated room into the raw air, working or sleeping in overheated rooms, etc. If the cause cannot be removed at once, such as the poisons of specific diseases, we must regard these conditions, and shape our therapeutics as best we can to palliate the cause, while we endeavor to remove the intercurrent bronchitis. But in the majority of cases we will have to deal with a true catarrh, the result of incautious exposure to cold, and the treatment in these cases will depend simply upon the condition of the patient and the urgency of the demands for relief. In mild cases, and especially in adults, the treatment is comparatively easy, provided you can control your patient. It consists in a gentle laxative, a temperature of 60° to 70°; liq. ammon. acet., 3 ij; spts. ether. nit., 3 ss, every 4 hours; rest in bed; blankets in abundance; a thorough diaphoresis; potass. bromid., grs. xv.; morphine, gr. ½, every 6 hours; hot teas for from 2 to 5 days; and, in suitable cases, inhalations of warm vapor. In cases which cannot be controlled, and which will go out in spite of advice to the contrary, we can allay cough by morphia or chloral, protect the chest by several layers of flannel, order a camphor, or belladonna plaster, and use strong tonics from the start. Should the secretion be very tenacious, we can give bromide

of potassium, carbonate or chlorate of potassa, muriate of ammonia, with small doses of wine of ipecac. or tinct. or fluid ext. hyoseyamus. At nights there may be friction over the chest, with or without liniments. I usually order tr. camph., $\frac{3}{4}$ ij; capsici, $\frac{3}{4}$ ss; ol. olivæ, $\frac{3}{4}$ iij; or equal parts of alcohol and ol. terebinth., or Stokes' liniment. At present I almost invariably order some preparation of quinine or cinchona as soon as the cough medicines are laid aside, and often before this is done.

But these are not the cases which demand our greatest skill. The cases requiring most attention and most careful practice are the acute and extensive ones, with fever, cough, restlessness, dyspnoea, orthopnoea, and sleeplessness. Chambers, of London, in acute cases, in adults, affixes a hot jacket poultice and renews it very often, so as to keep a constant moist heat over the entire chest; he also orders inhalations of warm vapor continuously for several days, and as soon as the sputa become free and opaque, gives either bark or quinia. He claims for this treatment great success, great relief from cough and dyspnoea, and a rapid convalescence. Niemeyer and others favor this inhalation, and speak most encouragingly of the results obtained. In acute capillary bronchitis, venesection, leeching, etc., are not now used, unless complicated by pneumonia or pleurisy, and then only with caution. Most if not all authorities appear to agree upon certain things as essential:—

1. Free diaphoresis, warm room, warm coverings, warm drinks, hot foot baths.
2. Warm or hot applications to the chest (Niemeyer even gives *hot* baths in extreme cases); mustard poultices, hot flannels, etc., are used as hot as can be borne.
3. For cough, morphia, atropia, hydrocyanic acid, chloroform, ether, etc. I greatly prefer bromide of potassium and chloral, used very guardedly.
4. Small doses of ipecac., tartar emetic, etc., in early stages.
5. If the secretions be tough, the alkalies and chlorides.
6. Tonics as soon as fever subsides; blisters, if required; painting with iodine.

In children, I do not think too much stress can be laid on the great value of diaphoresis in the incipient stages. Warm baths, hot flannels, hot poultices, with warm inhalations, if practicable, and warm rooms, are admirable therapeutic agents. I have seen great relief from a bold use of ammon. acet. and nitre, with hot teas. For incessant cough, without much fever, I have seen inhalations of chloroform, repeated 4 or 5 times a day, give complete relief, and this, in one case, in a child five months old. I am almost certain (many of our most prominent Baltimore physicians to the contrary, notwithstanding), that I have procured excellent results by: \mathcal{R} Calomel, gr. $\frac{1}{8}$; tartar emetic, gr. $\frac{1}{16}$ – $\frac{1}{32}$; potass. nit. gr. $\frac{1}{2}$ –j, every 4 or 6 hours, for 2 or 3 days. If, after the acute attack, the cough still continues troublesome, and secretion tenacious, I have found potass. bromid., potass. bicarb., vin. ipecac., and syr. senegæ or scillæ to give favorable results; and also hydrate of chloral,

with potass. brom., if carefully watched. In using any narcotic, in severe cases, great care is necessary to avoid narcotism, if the secretion be at all free.

The dyspnoea, which is a marked feature of the disease, may be produced by two causes: 1. From spasm of the bronchial muscular fibre. Relieved by chloroform, chloral, ether, morphia or opium—some form of narcotic.

2. From occlusion of tubes and filling of air cells by excessive secretion; diagnosed by rales, etc. Assist expulsion by emetics boldly used, with stimulants and supporting treatment in the intervals. Support strength by beef tea, milk, cream, brandy, wine, etc., in small quantities, often repeated; but avoid full meals and prolonged sleep, as the one, by reflex action, may induce spasm and much coughing, and the other permits great accumulation of secretion, and hastens asphyxia.

As fever falls, give bark, quinine, iron, etc. I often prescribe the citrate of quinine and iron dissolved in good sherry wine, and have been much pleased with it.

DR. H. R. NOEL.—*Proceedings Baltimore Medical Society from Philadelphia Med. Reporter.*

ON THE TREATMENT OF ULCERS OF THE LEG.

By Dr. J. GORDON BLACK, Surgeon to the Hospital for Sick Children, Newcastle-on-Tyne.

The perusal of the valuable reports which have appeared in the Journal on the treatment of ulcers, at the various London Hospitals, induces me to offer a few remarks, in the belief that good will accrue from the further ventilation of the subject.

It seems pretty generally admitted, that the treatment of ulcers of the leg in the out-patient room is unsatisfactory and disheartening. Whilst some instance the intemperate habits, the poorly-fed and over-worked condition of the patients, to account for this want of success, I am more inclined to blame a wide-spread belief in the profession, as expressed by Mr. Lawson, of the Middlesex Hospital, that "for the effectual treatment of all ulcers of the leg, absolute rest of the limb is the first element." Having for some time past been in the habit of curing cases of this kind without requiring the patient to neglect his ordinary duties for a single day, I certainly cannot hold such a belief. If it be possible to cure a large ulcer of the leg without rest, and in quite as short a time, to say the least, as would be required to heal the same by recourse to the horizontal position, what becomes of the theory that absolute rest is necessary?

Moreover, during the time that the patient remains in bed, the circulation through the limb is rendered more efficient, and healing of the ulcer ensues; but no sooner are the ordinary duties resumed, than the old conditions recur, bringing back with them the inevitable ulcer. A cure, therefore, under the absolute rest system, can scarcely be alleged, because it is not permanent; whereas, if an ulcer be healed without rest, it is clear that a cure has been effected, provided similar therapeutic con-

ditions are maintained. This latter provision cannot, of course, be observed under the former plan of management.

Knowing, as I do, the easy practicability of healing ulcers without rest, I cannot think it proper to admit such ailments to the wards of an hospital. To do so, seems wasting the funds of the institution, no less than the time and labor of the sufferer. At the same time, it is not creditable to surgery that such patients should be neglected, or given to understand that their weary and loathsome malady is incurable.

The plan which I adopt is practically the same as that recommended by Baynton, nearly eighty years ago, but with the important modification of using it antiseptically. Baynton's strapping has long been recognised as valuable and effective, and is described by Mr. Erichsen under the head of "Indolent Ulcer." Such management, however, taxed too severely the time and patience of the surgeon, for its successful practice. Unless the plasters were very frequently removed (Mr. Erichsen says every forty-eight hours at least), the pent-up discharge became very offensive, causing the dressings to be disagreeable, both to doctor and patient.

In order to avoid these disadvantages, I now warm the plasters by passing them through hot water, to which a little solution of carbolic acid has been added. The sore having been washed clean by the patient, is then saturated with a weak solution of carbolic acid, and the straps, first treated as described, applied. The pieces of plaster (stout emplastrum saponis), should be two inches broad and long enough to overlap four inches, after passing completely round the limb. They should be applied after the manner of a "Scot's dressing," from about three inches below the lowest diseased surface, to about the same distance above the highest. In their adjustment I think it most important to use no compression, but simply to lay them down evenly, so as to fit the limb accurately, and leave no creases in the plaster. Should pain be produced, the strap has been improperly applied, and must be at once removed. The bandaging of the limb, lightly and carefully, from the toes to the knee, finishes the dressing, which latter need not occupy more than ten minutes altogether. The patient may be told to return at the end of a week, when, on removal, the plasters will show only a slight moisture, instead of the profuse and offensive discharge seen when no antiseptic is used.

The advantages of the above plan of treatment are briefly these: It is cleanly; it saves the time and labor of the surgeon, for the dressings need rarely be changed oftener than once a week, and occupy only a few minutes. And, finally, whilst the healing process is conducted with a minimum of pain and discomfort to the patient, he is in no way restricted from pursuing his ordinary occupations.

In cases of irritable ulcer with much pain, Baynton recommended the sufferer to remove the bandage occasionally, and pour cold water upon the strapping for a few minutes, afterwards drying lightly with a soft towel, and reapplying the bandage. The plan is

an excellent one, and usually very grateful to the patient's feelings.

Instead of employing carbolic acid, another good antiseptic may be used, namely, sulphurous acid. This is easily applied by playing upon the ulcer and surrounding diseased skin with a Dewar's spray apparatus. The plasters may then be adjusted, after passing them through hot water, simply. A little smarting ensues, which, however, soon passes off. The effect of the sulphurous acid, in checking discharge and mal-odour, is quite as good as that of the carbolic, whilst its application is perhaps less troublesome and disagreeable. The sulphurous acid is especially suitable to ulcers of moderate size.

Baynton's strapping, especially when used antiseptically, may be employed for nearly all kinds of ulcers. The surface of a weak, indolent, or inflamed ulcer, speedily assumes a healthy appearance, without the preliminary use of astringent, soothing or other lotions being necessary. The most irritable sore may be strapped if care, and no compression, be used. Occasionally, however, it may be found advantageous to substitute linen or calico for the plaster straps.

For varicose ulcers, no treatment could be better. The horny edges of the "callous" variety quickly disappear, without recourse to such a dangerous excitant as blistering, which may easily set up unmanageable inflammation in the old or infirm. In eight or ten dressings, even very extensive ulcers may be healed by strapping, so that the cases must be few where skin grafting is really needed.

The administration of medicines internally is unnecessary. In most cases opium may be given to relieve pain, but the healing process goes on steadily, without such assistance.

I observe that Mr. Nourse, of Brighton, has used strapping and bandaging with great success. The plan, I feel sure, only requires more extensive employment to be better appreciated. For the frequent failure of the ordinary treatment by lotions, &c., patients are often blamed, because they do not strictly obey the instructions given. This neglect is, however, due rather to the well-known feebleness of such remedies, than to any lack of pains or inconvenience on the part of the sufferers. On the other hand, the interest which the latter manifest in carrying out directions under the treatment by strapping, is by no means the least recommendation of this method.—*British Medical Journal*.

CASE OF SPASMODIC DYSMENORRŒA.

Under the care of Dr. MATTHEWS DUNCAN, at the Edinburgh Royal Infirmary.

The following case illustrates very clearly the symptoms of the so-called mechanical dysmenorrhœa which, according to some authorities, is in almost every instance due to a flexion of the uterus. Whatever may be the frequency of flexion of the uterus (and it varies greatly with different practitioners)

it is certain that this bent condition of the organ may sometimes cause painful and irregular menstruation; but it would appear from the evidence of good and unprejudiced observers that the part which a flexed uterus plays in the female economy has been greatly exaggerated.

M. H—, twenty-nine years of age, married for four years, has had no children, was admitted to ward 16 on the 26th of June, 1873, complaining of pain during menstruation. Patient is a strong-looking, stout, ruddy-complexioned female, and, with the exception of the complaint mentioned, enjoys, and has always enjoyed, good health. The dysmenorrhœa commenced when patient was sixteen years old—at which age menstruation began—and has continued without intermission ever since. The discharge is preceded generally by vomiting, and the pain accompanying it is of so severe a character that it necessitates her lying in bed for four or five days. The pain is referred by her to the hypogastric and lumbar regions, more especially the former.

July 4th. On vaginal examination during the day preceding a monthly period, nothing particular is discovered. On passing No. 9 of the series of uterine bougies (corresponding to the male urethral series), patient complains loudly as soon as the internal os is reached, and this number is as large as can be easily passed.

July 5th. Patient is menstruating to day. No. 9 sound passes without pain. No. 12 bougie causes the same pain that No. 9 did on a former occasion. No. 14 was passed.

6th. The patient declares herself quite free from pain. No. 14 bougie goes into the cervical cavity quite easily.

14th. Has been quite free from pain since last report. She says that she has never had such an easy monthly period.

15th. Dismissed at her own request.

One case proves very little, but this is a good example of the use and efficiency of treatment by bougies. The success certainly astonished the woman very much. This case also illustrates very distinctly one branch of the argument against the mere mechanical character of this dysmenorrhœa, which is more justly called spasmodic. It was a characteristic case of what is called mechanical dysmenorrhœa. The internal os uteri was very sensitive, tender, and rigid, yet it easily passed a No. 9 bougie, indicating a passage of dimensions quite natural, and more than sufficient to transmit the menstrual flow. Moreover, in this case the state of the internal os during the flow was examined, and it was then found enlarged, not contracted; it then allowed a No. 14 bougie to pass easily. In short, with all the symptoms of so-called mechanical dysmenorrhœa, there was not only no obstruction, but more than usual enlargement of the passage of exit for the menstrual fluid.—*Lancet*, Sept. 6, 1873.

TREATMENT OF IMPERFORATE ANUS.

Amongst the operations that may at any moment present themselves to the surgeon, that required for

the relief of imperforate anus is one of the most delicate and important, and he should be prepared to meet any difficulties that may present themselves. "We too frequently neglect," says M. Verneuil, "to ask whether the newborn infant has evacuated the urine and meconium; and when it is ascertained that the anus is imperforate, much valuable time has been lost." Thus, he has himself been called upon to operate on the fourth day. He observes that the success of the operation has been made greater in recent times, when, instead of pushing a trocar at hazard in various directions, deliberate dissection has been made. This is particularly requisite where there is no projection of the rectum, or where the inferior extremity of the rectum is altogether absent. A convenient place should be selected, the infant on its belly, with the knees bent and thighs well separated. An incision should then be made from the easily found point of the coccyx, along the median raphe towards the scrotum or vulva. It is important to keep in the middle line, where we find always, as we are taught by embryogeny, in the absence of the rectum, a fibrous band which runs as far as to the membranous region or inferior third of the vagina. This is a valuable guide that must not be lost. When the incision made *layer by layer* is sufficiently deep, then may be perceived, on separating the cut edges of the wound well from each other, and directing a jet of cold water upon them, a small black point not larger than the head of a pin. This is the intestine, and if it be moveable it should be drawn towards the skin. It is a fortunate circumstance when this can be done without opening it. More frequently it is only possible to seize the end of the intestine with the hook, and an incision is then made into it. The meconium then flows away, and begins at once to be a source of trouble; its flow sometimes lasts for a considerable period. It must be watched with patience, and waited for till it has finished, in order to complete the operation, which consists in sewing the rectum securely to the skin, taking care that the opening is free, and that there are no chances of retraction or of infiltration. But it may also happen that a deep incision may be made into the perineum, and nothing may be found. The situation becomes a grave one, for it is necessary to continue the dissection into the true pelvis. The operation is difficult, and the guides to it obscure. Not unfrequently the absence of the rectum exists for a considerable portion of its extent. To keep straight in this course across the pelvis, it is important not to lose the walls, the curvature of the sacrum in particular, which is a valuable guide. It is, nevertheless, attended with much difficulty, and M. Verneuil has suggested a proceeding which materially facilitates it. It consists in giving a cut with the scissors on each side of the coccyx, which can then be drawn back, and at once affords greater space to work in. In one instance M. Verneuil found a cut of a quarter of an inch long on either side sufficient, but in others it is necessary to make the incisions over quarter of an inch. He has thus succeeded in cases where otherwise the operation would have had to be given up, and some other

attempted. Once formed, the retraction and contraction of the new anus should be prevented by directing the mother to introduce the point of the little finger into it several times a day. Most of the cases of imperforate anus prove fatal.—*The Practitioner*.

ERGOT IN THE TREATMENT OF NERVOUS DISEASES.

Dr. Daniel Kitchen, Assistant Physician to the New York State Lunatic Asylum, makes, in the July number of the *American Journal of Insanity*, an interesting report of the action of ergot in certain nervous affections. He used the fluid extract and the aqueous extract, or ergotine, made by Merck, of Vienna. The dose of the former is from one to two drachms; the latter from six to ten grains. One drachm of the alcoholic extract is equal to about six grains of the ergotine. He also used a few ounces of a solid extract, which is about equal in strength to imported ergotine. The full physiological effect of ergot will last from one-half to three quarters of an hour.

“There is probably no condition so annoying to the patient as headache, and certainly it is the most common. In the following forms we have used ergotine with much benefit and comfort to the patient: 1. Headache, depending on plethora or fullness of blood; 2. Headache from anæmia; 3. Headache depending on changes in brain substance and the membranes; 4. Epileptic headaches, 5. Migraine, 6. Headache depending on disordered menstruation. The most common form of headache is the first or that depending on a plethoric condition of the blood-vessels of the brain. Of course we cannot estimate correctly the amount of pain endured at each sickness, but it depends largely upon the constitutional character and nervous susceptibility of the patient. In plethoric headaches the course is either very short (a few hours at most), or they last for some days. The pain is usually referable to the back of the head, and there is much throbbing of the temporal arteries. In this class of headaches we have used ergotine largely; about one-hundred patients have been prescribed for, and in almost every instance relief was given in less than half an hour, and the attack thoroughly cut short.

“In headache from an anæmic condition of the brain the blood-vessels are usually lax, and as a consequence there is a slowness of the circulation. Ergotine contracts the blood-vessels, thereby giving tone to the arterial system; the blood is forced more quickly and regularly through the brain, and of course in greater quantity. Our cases of cerebral anæmia are comparatively few, and experiments are therefore limited; yet in those cases where we have had an opportunity of using it happy results have followed. In epileptic headaches and in epilepsy we have used ergot largely. In *petit mal* there are muscular twitchings, congestions of the face, suffusion of the eyes, and a rush of blood to the head. We have in many of these cases been able to ward

off the *grand mal* by large doses of ergotine. We have often combined it with conium, and it seems in this combination to work even more satisfactorily than alone, which is chiefly due, we suppose, to the sedative effect of the conium. In migraine, or sick-headache, we have distended blood-vessels pressing on the opthalmic division of the fifth nerve, thereby causing the pain; and if we accept this theory, then ergotine, by contracting the blood vessels, will relieve the headache. In headaches depending upon some disordered condition of menstruation we usually have a fullness or congestion of the cerebral vessels: sometimes, however, it may occur from anæmia of the brain. In both forms the use of ergotine is beneficial.”

Dr. K. concludes his paper with the following statements:

“1. Benefit of combination with bromide of potassium in epilepsy; 2. It is apt to produce cramps and pain in the stomach, which is remedied by combination with conium; 3. In nervous diseases it soothes all renal irritation and catarrh of the bladder; 4. It dilates the pupil sufficiently to be noticed; 5. Increases both frequency and tension of the pulse; 6. Has no appreciable effect on the heat of the body; 7. In large doses it produces the same effect as conium, by inducing sleep; 8. Its beneficial action in delirium tremens, after bromide of potassium has failed; 9. It combines readily in form of pill with sulphate of quinine; 10. It is a cerebral sedative; 11. Ergotine possesses an advantage over the alcoholic extract in not producing any pain or cramp in the stomach, and is given in smaller quantity; 12. Ergot is not likely to be adulterated, and we always secure an appreciable effect after its administration.” —*American Practitioner*.

TREATMENT OF ERYSIPELAS BY THE TINCT. VERAT. VIRID. CO. CONC.

By JOHN W. LANE, M.D., L.R.C.S., &c.

In June, 1863, I was consulted by a patient who was suffering from mammary cancer, in reference to a violent burning pain, with redness and swelling of the right arm from the wrist to the shoulder and neck. On examination, I found she had been attacked with simple erysipelas, accompanied by the usual common symptoms, she remarking that since it had made its appearance the day before, the cancer had become quite painless and easy. She had been applying the above tincture to the schirrhous mass twice a day for some time, it having been prescribed for her by a London specialist (cancer), at the same time saying that she thought it was a very good application, as it relieved the violent burning pain for some hours after it had been applied, and the only disagreeable symptom was a peculiar tingling sensation on the surrounding skin, producing slight giddiness and then drowsiness. I thought that this application was most likely the primary cause of the erysipelas, and desired her to stop using it. “Well, why doctor,” she said, quite logically. “If it cases

the burning pain in my breast, may it not also ease this burning pain in my arm?" Her argument induced me to try it, so getting a small camel-hair pencil, I applied it all around the shoulder and under the arm, thus covering the extreme boundary of the erysipelatous rash and about two inches of the sound skin. I went to visit her the same evening and was surprised to find that the erysipelas had not spread, at once I applied it freely all over the arm, thus painting, I may say, the whole extent of the surface attacked; the usual concomitant symptoms began to disappear. Next morning on visiting her I made a fresh application, she remarking that the burning sensation disappeared in a few moments after I had painted the whole arm. One more application same evening and one next day were all required, as upon washing off the dark-looking crust upon the arm it had returned to its normal size, color, and feeling. Very shortly afterwards I was sent for to a case of erysipelas of the face and neck. I applied the tincture pretty freely, taking care to go far enough upon the sound skin with it. Three applications eradicated the disease; since then I have had numbers of cases affecting, I may safely say, nearly all parts of the body, the worst one being where the right leg and side were affected from the toes up to the arm-pit; two dressings a day were all I used in this case as it covered a large surface. But where the erysipelas is more circumscribed I use it, say every four hours or oftener; to some patients I have administered the tincture at the same time, in doses of from two to seven drops three times a day, but I saw no difference in its effects. I cannot exactly say the number of cases I have had within the ten years past, perhaps twenty, and I have never known the application to fail in arresting the spread of simple erysipelas. I have made known the remedy to various of my medical friends in Shropshire, but have not heard of them ever using it except the late Mr. Clement, of Shrewsbury, who used some I gave him, and said it certainly had a wonderful effect, though he had only tried two cases. It is an American preparation made by "Keith, of New York," supplied to me by "Twinberrow & Son, Cavendish Square, London." I should be glad if some of my medical brethren would get some, use it alone in treatment of any cases they may have, and make known the results in the columns of this paper. Having never heard nor read of this tincture ever being used in this country (of course I do not know what any of our transatlantic brethren may have done), but I think if there is any specific in it, it should have a trial. I forgot to mention that in some cases I diluted it with equal parts of whisky, and generally gave a mixture containing *nit. potass.* and *hyoscyamus*.

Bishop's Castle, Salop, Dec., 1873.
—*Dublin Medical Press*.

PHOSPHORUS IN NEURALGIA.

In October of last year I wrote a letter to the *British Medical Journal*, calling attention to the value of phosphorus in the treatment of neuralgia. Since this date I have given it a somewhat extensive trial,

the general result of which is to confirm the favourable report I made of it in my first letter. I have prescribed it in various neuroses, in melancholia, in impotence, in mercurial tremor, in locomotor ataxy, etc., but have come to the conclusion that its value is most conspicuously and constantly seen in cases of nerve-pain, accompanied or caused by asthenia: indeed, while it has appeared to me quite inert in most of the separate diseases I have mentioned above, it has rarely disappointed me, when properly administered, in true cases of anæmic or asthenic neuralgia, amongst the remedies for which disorders I believe it will ever hold a high and secure place. Its mode of administration is, however, of importance; and while in many respects agreeing with Mr. J. Ashburton Thompson in his remarks upon this remedy, which appear in the *Practitioner* for July, I cannot indorse his statement as to the wisdom, or even the safety, of beginning with a dose of one-twelfth of a grain every four hours. Mr. Gubler, in a recent number of the *Bulletin Général de Thérapeutique*, is more correct, I think, in urging great caution in the administration of this powerful remedy: indeed, in the seventeen cases treated by Mr. Thompson, one suffered from serious and alarming symptoms, as the result, we may fairly presume, of the phosphorus, which was administered in the dose of one-twelfth of a grain. My custom is to commence with one-hundredth of a grain, and gradually increase this by one-fiftieth of a grain at a time, until, if necessary, one-tenth of a grain is taken with each dose. Beyond this quantity I do not go; as I think that, if the remedy be of use, relief will be attained by this dose equally with a larger. After trying several preparations, I now use a formula which Mr. Potts, dispenser to the Manchester Royal Infirmary, hit upon, and which seems to answer every purpose, in being tasteless, transparent, and readily prepared. He dissolves ten grains of phosphorus in two ounces of ether, agitating the solution from time to time; and of this solution, one minim (containing one-hundredth of a grain) is administered in an ounce of water with half a drachm of glycerine. The glycerine suspends the phosphorus so perfectly that a transparent mixture is the result. The addition of a little bitter infusion entirely removes any *soupeçon* of lucifer-matches which may hover about the medicine.

S. MESSENGER BRADLEY, Manchester.

NITRIC ACID IN THE TREATMENT OF HOOPING-COUGH.

Mr. Berry states (*Med. Times and Gaz.*, Feb., 1873), that he has found dilute nitric acid, in doses of from five to fifteen minims—according to age—with simple syrup, given every three or four hours, to alleviate the cough and spasm, and apparently cut short the disease. In all cases, at the same time, Mr. B. has paid attention to the state of the digestive organs, and in such cases as required it he gave an aperient combined with a laxative.

THE ADMINISTRATION OF PODOPHYLLIN.

As podophyllin in some combinations produces considerable pain without corresponding benefit, any plan for increasing the certainty of its remedial action is likely to be interesting. I venture to call attention to a powder which I have used for some time, and which has proved extremely useful. The following is my formula. *R.* Podophyllin gr. ivss; extracti elaterii gr. ivss; pulveris jalapæ comp. 3 vj. *M.*—Half a drachm of the above powder in half a pint of warm water acts most effectually, and the cholagogue effects of the podophyllin seem to be assisted by the hydragogues, the latter washing out the bile in a most satisfactory manner.

The immediate effects of this powder are somewhat as follows. In half an hour, there is free diaphoresis, followed by vomiting, and afterwards copious liquid and bilious stools. This has not, in my experience, been followed by the constipation which frequently occurs after free purging—perhaps on account of the increased flow of bile not ceasing with the primary cathartic effect. In case of ascites, with defective secretion from the liver, its power of reducing the amount of the effused fluid is most remarkable. The bulk of the powder, in dividing such active drugs as elaterium and podophyllin, is a decided advantage.

Grimston, Lynn.

ALFRED E. BARRETT.

TREATMENT OF CERTAIN FORMS OF BRONCHOCÆLE BY INJECTIONS OF IODINE.

Dr. Morell Mackenzie stated that in a former paper he had described in detail the various methods applicable to the several kinds of enlargement of the thyroid gland. In discussing the treatment of fibrous bronchocœle in the article referred to, he did not do justice to the method recently introduced by Prof. Lecke, of Berne. A larger experience, made under more favourable conditions, had convinced him that the treatment of certain forms of bronchocœle by the subcutaneous injection of iodine into the substance of the enlarged gland, was of the greatest value. The following was the plan of treatment, which, in accordance with Dr. Lecke's recommendation, the author had employed: Thirty drops of the official tincture of iodine were injected into the substance of the gland once a week for the first two or three weeks, and afterwards once a fortnight, as long as was necessary. It was well to give iodide of potassium internally, at the same time; but no medicine was given to any of the patients whose cases were now related. The advantages of the treatment were, that it did not cause any constitutional disturbance or local irritation (suppuration.) In this respect, it was preferable to treatment by setons and caustic darts. The only disadvantage of the method was its slowness; this, however, could scarcely be considered a drawback, except when the enlarged gland caused urgent dyspnoea. The cases which were briefly related had been taken indiscriminately as they presented themselves, or were found

in the case-book of the Throat Hospital on July 24th. Of the sixteen cases, fourteen were fibrous, and two adenoid, or soft. Fourteen patients were females and two males. Eleven were completely cured, in four a considerable reduction resulted, and one case completely resisted treatment. In one case the neck was reduced by $3\frac{3}{4}$ inches in less than six months; in two cases a reduction of $2\frac{1}{2}$ inches took place. The duration of treatment varied from one to eight months, the average being four months. The author concluded by remarking that the treatment of cystic cases by injections of iron, as previously recommended by him, was, of course, much more rapid, and therefore more striking: but the fibrous cases were undoubtedly the most difficult to treat of those varieties met with in practice. Dr. Mackenzie added that suppuration had not occurred in any case where the injection had been made into the gland itself. The failures of the treatment were 5 per cent. Mr. Meade's treatment by division of the fascia in the central line, where symptoms of dyspnoea indicated mechanical pressure had been found successful in alleviating this.—*Proc. Brit. Med. Ass., in Brit. Med. Journ., Aug. 30, 1873.*

VOMITING OF PREGNANCY.

Dr. Atthill, in the *Medical Press and Circular* says that the hypodermic injection of morphia occasionally controls the vomiting met with in pregnancy, or that which sometimes follows severe cases of *post-partum* hemorrhage. The formula which he now adopts for the solution to be injected subcutaneously is the following:

<i>R.</i> Acetatis morphiæ	gr. viij.
Liquoris atropiæ	<i>M.</i> xlvij.
Glycerini	3. v.
Aquam ad	3. iv.

Fifteen drops of this solution contains half a grain of the acetate of morphia, and about the fortieth of a grain of atropia.

HOW TO ADMINISTER LARGE INJECTIONS.

Very large injections, half a gallon to a gallon can be administered, says Dr. Wilbrand, by placing a patient upon his elbows and knees, so that the anus becomes the highest point of the intestinal canal. They are extremely useful in fecal accumulation, intussusception, lesions of the ilio-cœcal valve, &c.

THE USE OF RAW MEAT IN PHTHISIS.

The following formula is found useful:—Take beef reduced to pulp, mix this with rum, brandy or whiskey enough to make into a soft mass, to which may be added, according to the patient's taste either salt or sugar; several spoonfuls to be taken during the day.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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THE SOCIAL EVIL.

The Sanitary Association of Montreal, at one of its late meetings, appointed a committee to enquire into the best modes of dealing with the social evil as it exists among us; especially in so far as it affects the health of the community from diseases arising out of it. The report of that committee is before us, and we believe that the conclusions arrived at, namely, that registration of prostitution is the best mode of dealing with the matter, will receive the support of the medical profession at large.

The question has been viewed from so many standpoints, that it becomes almost impossible to follow the arguments which have been adduced about it. If the subject merely concerned individuals following a life of prostitution, as well as those who are its customers, nothing further might be said about the evil; and we might allow it to continue unrecognised. Unfortunately, however, there are diseases which arise out of prostitution and which are the sequences of debauchery and these from the exercise of promiscuous intercourse, are spread far and wide. The medical profession of to day do not require to be told of the effects of the chief of these diseases, the merest tiro of our profession is fully conversant with its bateful powers, and not only the latter for a large proportion of the influential men of our community understand the subject to some extent. It is therefore marvellous that measures have not long before this been adopted to protect the community from a disease which is more dangerous to the individual and his offspring than small pox and is more insidious in effects.

To attack syphilis properly the causes of prostitution must be studied, and remedied wherever possible. If we could remove the evil, syphilis would in consequence die out and there would be no occasion for providing safeguards. From the very nature of humanity the causes of prostitution cannot be remedied and therefore it will always exist in our midst. There is no need to quote history to prove this fact. Have there not been Rahab's and

Mary Magdalenes in all times? and of which there is no proof that all such have been driven to a life of degradation by stern necessity? We do not think that Potiphar's wife was or is a solitary exception, daily events disprove any such conclusion so that we do not *indulge* in any Utopian views contrary to well known and established facts. At the same time we do not for a moment mean to insinuate that all women would be bad if placed under certain circumstances; but think that there are both men and women prone to evil, as there are to the contrary. A class of professional prostitutes is to a great extent one of the safeguards of society, as at present constituted, but that class from the nature of their trade are peculiarly liable to contract and spread disease. Inasmuch as it is impossible to remove the predisposing causes which spread widecast certain affections, especially syphilis, we cannot see any other mode to keep them in check than by adopting a system of registration and inspection. We have no doubt that if such a system was universally carried out, syphilis might be entirely eradicated from our midst. That amelioration has followed the adoption of registration and inspection there can be no doubt. It has been proved from statistics compiled in Great Britain, that wherever the contagious diseases act has been enforced this disease has been greatly checked. From the army returns it has been shown that there is a marked decline in the admission of primary sores wherever the act is in operation. If we compare the proportion of admissions in stations at which the act is in force, with those where it is not, we find the admissions per 1000 for primary venereal sores to be 54 at the former and 113 at the latter. There is however, no use in dealing with the matter by piecemeal; any act formed for the control of prostitution, must include the whole Dominion so that the re-introduction of disease from distant parts will be prevented. Stringent laws should be enacted and enforced not only to prevent its spread but also its reintroduction whether by male or female. We have not come to this conclusion without due deliberation for we have time and again been impressed by facts which have come under our personal observation of the necessity of legislation in the matter. We are also aware that to the great majority of our respectable fellow citizens, the subject is distasteful bringing to light as it does the canker which is gnawing at the vitals of society. We see no reason why the matter should be shunned, even if disagreeable, as we deem it the duty of all conversant with the extent of the evil, to discuss the advisability of legislation and we would further suggest that no

accusation of pseudo morality prevent them from advocating views which already receive their private sanction.

A New York letter to the Springfield *Republican* gives the following as an account of the incomes of medical men:

"A physician in good practice will receive patients at his office four hours daily, and make calls for about the same length of time. From ten to twenty callers, and half as many house patients, would be a fair average; the fees would be two and five dollars each. At these figures it would not be hard to make up an income of 20,000 dollars or more. It is said of Dr. Willard Parker, I believe, that having been called out of town to attend a patient, he returned a bill of 300 dollars, and when it was disputed he showed by his books that his daily receipts were much over that sum. Surgeons' single charges are larger than those of physicians, though the incomes of the latter are probably the highest. For ordinary attendance their rates are about the same, or say five dollars a visit. From twenty-five dollars upwards is the charge for operations. For setting an arm or leg 250 dollars would be asked; larger undertakings being in proportion. For a case requiring a delicate operation and six weeks' constant attendance, sometimes two or three times a day, 1,000 dollars was lately asked by a leading surgeon. In another instance, where a wealthy gentleman was badly jammed by a railroad car, he was attended by Dr. James R. Wood, who made about a dozen visits, without any important operation, and sent in a bill of 2,500 dollars, which was paid. This is exceeded by Dr. Carnochan, who charged 2,000 dollars for an operation alone, while another surgeon is said to have received 4,500 dollars from one patient. The prices charged by dentists are quite as high as those of physicians. A man of ordinary reputation in the profession will ask from five to thirty dollars for pulling a single tooth, while Mr. Alkinson, one of the most fashionable dentists, is reported to charge 10 dollars for simply examining a person's teeth, and 25 dollars an hour for operating upon them, and has brought in a bill of 200 dollars for filling a single tooth. Many people refuse to pay these fancy prices, but it is a common thing to have to pay anywhere from 10 to 100 dollars for dentists' bills. Most practitioners of any reputation have engagements very far ahead. Ten days is a short time to wait for your turn, while a friend of mine, who went to Europe in the middle of last October, on applying

to her dentist for treatment, was told that he could not give her a single hour's heed until February, or nearly four months in advance. Dentists are kept busy all the year round, and seldom have any leisure. Their practice is confining, and not healthy but it is very profitable. Their incomes range from \$5,000 to \$50,000 a year, while they have no expenses for carriage hire, books or travel, and not a very heavy outlay for materials and keeping up their offices."

THE SIAMESE TWINS.

In our last issue we mentioned the somewhat sudden death of the Siamese Twins, at their residence, Greensboro, North Carolina. Chang was discovered to be dead by his brother Eng, who immediately showed symptoms of great mental shock. Cold sweat came all over his body, and in the course of an hour from the time of the death of Chang, he became profoundly comatose, and so continued till he died. A Commission from the Academy of Medicine of Philadelphia proceeded to the residence of the twins, and after some difficulty succeeded in getting permission to remove the bodies to Philadelphia for the purpose of anatomical examination. This took place on the 18th of February, and was made by Drs. Paucoast and Allen. A complete report has not yet been published; but so far as the examination was made on the above date, the following, copied from the *Philadelphia Medical and Surgical Reporter*, gives the anatomical peculiarity of the band which united these singular beings, and which, of course, was the principal object of interest:—

The band which united them was four inches long and eight inches in circumference. Processes of the peritoneum ran up to the median line of this band, but there was a complete separation of the peritoneal cavities at this line. The hypogastric arteries under the anterior walls of the abdomen distributed branches from each body into the band. The ensiform appendices of the sternum were united in the median line by a continuity of cartilaginous structure, but not by any true articulation. A vascular connection between the two bodies was demonstrated by injecting colored plaster into the portal circulation of Chang, which appeared in the portal circulation of Eng. The track of this injection passed beneath the peritoneal prolongation of Chang, and above that of Eng, and although little parenchymatous structure was present, no reasonable doubt existed but that the communication between

the two circulatory systems was quite free. Doubtless the peritoneal pouches referred to contained, when in the foetal condition, true liver tissue, which, in process of growth, diminished and retracted, so as to leave the pouches empty.

The physical condition of the twins was contrasted. Eng was well nourished, while Chang was emaciated. It was the opinion of Dr. Allan that Chang died of cerebral clot, and Eng probably of Bright.

The band itself was composed of interlacing muscular and aponeurotic fibres passing across the median line and inserted into the ensiform cartilage of the opposite twin.

Such is a brief description of the nature of the connecting band of the twins. It shows that while separation in life would not have been necessarily fatal, it would have been extremely perilous, and they did wisely in refusing to submit to it.

Should any further details of interest appear in our exchanges, we will duly inform our readers, but what we have given above, covers it seems to us, the most interesting point of their organization.

TO CORRESPONDENTS.

Letters have been received from:—Dr. Grange, Petrolia; Dr. Browulow, Ogdensburg; Dr. Bower, Waddington, N. Y.; Dr. Malloch, Moose Factory; Dr. Bogart, Campbellford; Dr. Addison, Farmersville; Dr. Beith, Bowmanville; Dr. Flock, London; Dr. Woodruff, London; Dr. Aylwin, Quio; Dr. Holden, Belleville; Dr. Baxter, Cayuga; Dr. Clarke, Thurso; Dr. Gaboury, Rochester; Dr. Laouette, Gentilly; Dr. Dunn, North Augusta; Dr. Harkness, Matilda; Dr. Comfort, Campden; Dr. Brown, Winchester; Dr. Wickwire, Halifax; Dr. Anderson, Ormstown; Dr. McLaren, Ormstown; The Senate, Ottawa; Dr. Stevens, Dunham Flats; Dr. Bingham, Warsaw; Dr. Cluness, Sacramento, California; Dr. Morse, Amherst, Nova Scotia; Dr. Reed, Inverness; Dr. Bell, Dr. G. W. Campbell, Dr. Bowker, Dr. Godfrey, Dr. Barnes, Dr. Roddick, Montreal; Dr. Howard, St. Johns; Dr. Marsden, Quebec; Dr. Gilbert, Sherbrooke; Dr. Jones, Sherbrooke; Dr. McNiece, Robinson; Dr.———Levis; Dr. D. C. McCallum, Dr. Bull, Montreal; Dr. Dullessis, L'Avenir; Dr. Halliday, Grafton; Dr. Monizambert, Quebec; Dr. Fowler, Fergus; Dr. MacEwan, Carleton Place Junction; Dr. Dickson, Kingston; Dr. Aikins, Burnhamthorpe; Dr. Hington, Dr. Angus McDonnell, Dr. Ricard, Montreal; Hon. Dr. McNeill Parker, Halifax; Dr. P. W.

Smith, Digby, N.S.; Dr. Alexander, Fergus; Dr. Law, Bond Head; Laval University, Quebec; Dr. Webber, Richmond; Dr. Abbott, Hochelaga; Dr. Danth, Coteau Landing; Dr. Battersby, Port Dover, O.

CHLOROFORM IN HEART DISEASE.

Dr. J. W. Poole has recently discussed whether the presence of heart disease, even when strongly marked, is necessarily a contra-indication to the administration of an anæsthetic. He believes that it is not. He has searched all the authorities at his disposal on this point, but does not find anything very definite on the subject. Without citing any of them, however, he says that most of those who take notice of it at all agree with the opinion he has expressed. If any anæsthetic be administered, which should it be, chloroform or ether? He answers, chloroform, for the following reasons: It is more quickly administered, and more manageable; it requires less to be given; it produces a less violent and protracted stage of excitement. He has seen chloroform administered for the dyspnoea of heart, disease, both by the stomach and by inhalation, with decided benefit, and without the least bad effect.

NEWSPAPER PUFFERY.

The repeated examples we receive of the publication of startling "operations" by or with the knowledge of the physician in attendance, seems to show that the insidious form of advertising is on the increase. Otherwise reputable practitioners favor it, and seek its benefits. It is every whit as objectionable as the most fulsome handbills or market crying. Its tendency is the same, to deceive the public and injure the general standing of physicians before the public.

TO OUR SUBSCRIBERS.

We thank those who have responded so well to the accounts which were sent to all subscribers enclosed in our last number. Those who have not yet done so, will please remit at once. We have received a letter dated Levis, enclosing two dollars, for volume one, and requesting that the *Record* might be sent in future to that place, as the writer had moved thither. We have been unable to make out the signature, so cannot comply with the request, and do not know whom to credit with the amount. Write again, and make the signature plain.

TO OUR EXCHANGES.

We have not received a copy of the *New York Medical Journal* since August, 1873, of *New Remedies*, since October, 1873. We fear there is something radically wrong somewhere in the Post Office Department, either on this or the other side of the lines, for we do not exaggerate when we say that fifty per cent. of our Exchanges never reach us.

MONTREAL MEDICAL SCHOOLS.

The lectures at McGill College closed on the 12th March, and at Bishop's College on the 19th March. There are quite a number of candidates for graduation at both these schools.

We are informed that at a meeting of the Royal College of Physicians of London, England, held on the 20th February, the University of Bishop's College was placed on the list of Foreign and Colonial Universities recognised by that body.

TORONTO EYE AND EAR INFIRMARY.

We have received the sixth annual report of this Institution, which seems to be in a financially sound condition. It receives a grant of one thousand dollars a year from the Ontario Government, and one hundred dollars from the City of Toronto. The Infirmary has given relief to a very considerable number of cases, and is evidently doing a good work, in a quiet unostentatious way.

AMERICAN MEDICAL SCHOOLS.

The one hundred and eighth commencement of the University of Pennsylvania, took place in Philadelphia, on the 12th March, when the degree of M.D. was conferred on one hundred and twenty-one gentlemen, only one of whom was from the Dominion of Canada. He was from the Province of Nova Scotia. The day before, the 11th March, Jefferson College, Philadelphia, conferred the degree of M.D. on one hundred and fifty-one gentlemen, three of whom were from Canada.

PERSONAL.

Dr. George Bull, (M.D., McGill College, 1869), who for several years has resided in Montreal, has removed to Worcester, Massachusetts. In his new home, he carries with him the best wishes of his

many friends in this city. At the meeting of the Medico-Chirurgical Society of Montreal, held on the 27th Feb., the following resolution with reference to his departure was carried unanimously. Moved by Dr. Reddy, seconded by Dr. Francis W. Campbell that this Society learns with regret, that Dr. George Bull, one of its members, is about to remove from Montreal to Worcester, Massachusetts, and it cordially recommends him to the kindly greeting of the profession in his new home. In consideration of the active interest which Dr. Bull has always taken in the welfare of this Society, and with a view of extending its influence, it is further resolved, that he be elected a corresponding member.

Dr. R. F. Godfrey (Bishop's College, 1873), has graduated at Bellevue Hospital Medical College, New York. He has returned to Montreal, and was elected a member of the Medico-Chirurgical Society of Montreal at its last meeting.

Dr. Hamilton Allen, graduate of McGill College 1872, and Holmes medalist of that year, is now practising in Oconto, Wisconsin. He has met with considerable success, and intends, we believe, to visit England in the fall.

Dr. Trenholme's case of ovariectomy, which was operated upon on the 2nd of September, last, and the report of which appeared in this Journal, has been remarkably successful. The patient has not had a day's illness since that time, and is in the enjoyment of good health.

Dr. Lynn has been appointed Associate Coroner for the City of Ottawa.

Dr. Peter McEwan, of Carleton Place Junction is, we learn, a near relation of Dr. McNaughton, of Albany, the oldest medical teacher living, concerning whom a short paragraph appeared in our February issue.

OBITUARY.

DR. FORBES WINSLOW.

This eminent physician died in London, March 4. Though born in London, Aug., 1810, he commenced his professional education in New York, and continued his studies after his return to England. After obtaining his diploma from the Royal College of Surgeons, London, in 1835, he graduated M.D. at Aberdeen. Almost immediately afterward he was elected one of the fellows of the Royal College of

Physicians, Edinburgh. In the year 1851, while acting as Vice President of the Medical Society of London, he was selected as the Lettsomian Professor of Medicine for the term 1851 and 1852, and delivered three admirable lectures, the foundation of his future celebrity, in connection with the treatment of diseases of the brain and mind. The best energies of his great intellect have been devoted almost incessantly since to its elucidation, so that he has left this world with the well-earned reputation of a philanthropist, a scientist of the first order, and a professional expert of great knowledge and of un doubted probity and veracity. He was a member of the Royal College of Physicians, London.

S. W. BUTLER, M.D., of Philadelphia, died January 6, aged 40. He was the founder of the *Philadelphia Medical and Surgical Reporter*, in which, as in other branches of the literary department of medicine, he exhibited great energy and industry. The cause of his death was pulmonary consumption.

MEDICAL ITEMS AND NEWS.

WAR ON POTATOES.

Mulder, the celebrated physiologist, declares that the excessive use of potatoes among the poorer classes, and of coffee and tea by the higher ranks, is the cause of indolence among nations.

TWO HUNDRED THOUSAND DEATHS FROM CHOLERA are estimated to have taken place in Hungary, in the year ending Nov. 1, 1873.

INCIPIENT ABORTION has been arrested promptly by chloral hydrate.

The difficulty of getting rid of enuresis in young people is sometimes very great. In regard to remedy, led by an article in the *Berlin Klin. Wochenschrift*, resorted to syrup of the iodide of iron, frequently through the day, with every success.

TWENTY dollars a day is the amount of fine incurred by the law of Nova Scotia, going in force on the first of May, for practising medicine without being registered.

A BAD CASE.

The following lucid statement of his case was lately forwarded by a patient to his medical attendant :—

"I have a very bad stomach and sickness about my hart and great heat rising up true me and sweating in my face and at the but of the troth (throat) alys stifing me and all the trouble of the wourld in it and verry bound in the boulds and a pain in my head, and i douse allways be incline to discharge my stomach, and i never can, and i have often a great griping and a great bast (?) in my lung, and i dose bi belshing up every minut."

REVIEWS.

The Sphygmograph : Its Physiological and Pathological indications, with two hundred and ninety illustrations. By EDGAR HOLDEN, A.M., M.D. Philadelphia, Lindsay & Blakiston, 1874.

The basis of this monograph was an essay to which was awarded the Stevens triennial prize by the College of Physicians and Surgeons of New York, in April, 1873. The views advanced in the previous work have in the present been somewhat modified and amplified by the improvement of facilities subsequently enjoyed by the author for more accurate and extended observation with the instrument in the diseases where it is especially useful. Amongst these facilities Dr. Holden mentions his position as medical adviser to one of the largest life insurance companies of the United States, and as clinical physician for diseases of the chest to St. Michael's Hospital of, we suppose, Newark, New Jersey, as this is his place of residence.

In the first part of his book Dr. Holden treats us to a description of the instrument, together with some general considerations regarding its mechanism, and asserts that to Vierordt is due the suggestion of its applicability as an aid to the physician. Professor Marey's instrument was the one with which the author made his earlier observations, and he describes and figures it, giving its inventor a due meed of prominence, as indeed he must always deserve in any work on the Sphygmograph. Dr. Holden has however, considerably modified, and claims to have materially improved, the instrument, and it is with his own instrument that all his later observations have been made. The first part of the book is

further occupied with a description of the significance of the variations in the "events," as they are called of the sphygmographic tracings. The researches of British observers, such as Burdon-Sanderson, and Anstie, in this latter connection, receive their due meed of notice.

The second part of the work treats of the practical application of the instrument to the study of disease, and consists of descriptive notes in connection with sphygmographic tracings observed by the author in cases of heart disease, functional and organic, phthisis, bronchitis, rheumatic arthritis, and various diseases of the nervous system, such as epilepsy, delirium tremens, and progressive locomotor ataxia. The author's opening remarks in the first chapter of this part of the book merit the careful attention of every one who values accuracy of diagnosis and prognosis. He says: "The ability of any instrument to indicate a departure from perfect health, whether capable of also indicating the precise character of such departure, or not, would stamp it of practical value, just in proportion to its power to do this alone, or more certainly or better than could be done by other means. There are many reasons for believing that the sphygmograph will do all of these; that it will indicate a departure from perfect health, when not ascertainable by other means, is apparent in cases of degeneration of the texture of arteries; and if, as suggested by modern pathology, 'the earliest beginnings of what may be called degenerative disease consist in structural alteration of the minutest arteries' this fact alone would be of inestimable service. Prognosis in certain diseases, the estimation of longevity, the calculation of endurance in prolonged mental labor, and the danger of such labor where certain inheritable diseases are to be avoided, would find in it a valuable indicator. It is at once evident that, could we satisfactorily determine the variations compatible with health, the sphygmographic record of an applicant for life insurance would be the safest record he could present as a test of his condition; and this single feature could hardly fail to be of great pecuniary value in a country where the assurance of life is almost universal. Those who know and lament the multitude of recklessly made or ignorantly or fraudulently made, certificates of soundness, are aware that hundreds of thousands of dollars are annually sacrificed, that might be saved by some such means."

The third part of the book treats of the effects of certain drugs on the sphygmographic tracings, and comprises observations on persons under the influence of cannabis indica, gelseminum sempervirens, aconite and quinine. We cordially recommend this little book to those of our readers who may be interested in the Sphygmograph and may say that Dr. Holden's modification of Marey's instrument can be obtained from Otto and Reynders, instrument makers, of New York, at about one-third of the cost of the imported instrument. As we have already stated the illustrations of tracings are numerous, and the book as a whole, is beautifully got up, but the names of the publishers are a sufficient guarantee of this. We may be perhaps permitted to say in this connection that we wish English publishers would more generally follow the almost invariable practice of their transatlantic brethren, and have the leaves of the books they issue cut, before placing them in the hands of men whose time is so much occupied as that of the members of the Medical Profession.

BIRTH.

At Simcoe, Ont., on the 22nd March, the wife of James Hayes, M.D., of a son.

MARRIED.

In Montreal, on the 3rd of March, by the Rev. R. M. Thornton, M.A., Samuel Ewing, Esq., to Isabella Margaret, daughter of the late Ambrose Blacklock, Esq., M.D., member of the Royal College of Surgeons, London, England surgeon half-pay Royal Navy.

At St. Thomas' Church, St. Thomas, Ont., on Wednesday, the 4th instant, by the Rev. W. George Caulfield assisted by the Rev. Jeffrey Hill, Charles Battersby, M.D. of Port Dover, to Maria, eldest daughter of Benjamin Walker, Esq., of Belleville, Ont.

DEATHS.

In Montreal, on the 6th March, Cornelia B. MacNeil, relict of the late Dr. Horace Nelson, second daughter of the late Col. D. B. MacNeil, aged 50 years—and mother Dr. W. D. E. Nelson.

In Hamilton, Ontario, on the 4th March, Thomas Dugga M.D., aged 61 years.

Original Communications.

The Graduates Valedictory Address at the Third Annual Convocation of the Medical Faculty of the University of Bishops College, April 9th, 1874. By DAVID A. HART, C.M., M.D., of St. Zephirin, Quebec.

My Lord, Mr. Chancellor, Mr. Dean, Members of Convocation, ladies and gentlemen:—

To day, we have assembled in these classic halls for the purpose of taking part in the closing ceremonies of the Third Session of the Faculty of Medicine of this University, and to witness the sundering of ties that have long and pleasantly existed between the professors on the one hand and the students composing the graduating class of 1874, on the other.

Upon me, as Valedictorian of the Graduates, devolves the privilege, the sad yet pleasing duty of bidding a formal farewell to our Alma Mater, ere we leave her sheltering walls, and go forth to take our places in the ranks of those who are fighting the battle of life in the wider arena, and amid the more stirring scenes of the outside world. Glad though we may be that our time of probation has come to an end, and that we have been pronounced by skilled masters of the healing art worthy of being entrusted with the lives and happiness of fellow beings, yet it is with a feeling of regret that we take our departure from the Halls where we once met daily, where we shared the same hopes, the same anxieties, and finally, the same reward; where we have so often encountered one another in a spirit of generous rivalry, in our struggles to surpass one another in class-standing and to carry off the honors that our Alma Mater loves to bestow upon her deserving alumni. Where we have learnt a more peaceful meaning of Scott's

"Stern joy that warriors feel

In foemen worthy of their steel,"

and where, too, have been cemented friendships, the recollection of which will always be dearly cherished.

We meet here, classmates, as a body for the last time; to-morrow will witness a separation that may, to some of us, prove a lasting one. It is impossible, then, to prevent a feeling of sadness from mingling with and subduing those other feelings of pride and delight which so largely fill our breasts on this occasion, and from pervading the spirit of the few words I shall address to you. Before proceeding to utter those words of farewell, I will avail myself of my privilege as Valedictorian to return thanks to

our Professors, to whom we are so deeply indebted for that knowledge of the science of medicine which has enabled us to stand in the honorable and gratifying position we now occupy.

I can scarcely find fitting words wherewith to express our thanks and our sense of gratitude to our professors for their unceasing and untiring efforts to impart to us that knowledge of the theory and practice of medicine and surgery which it has cost them years of toil and study to acquire; for the cheerfulness with which they ever responded to our requests for information upon any difficult or knotty point that may have puzzled us for the time being, and impeded us in our progress to the goal at which we aimed, the honorable degree of C.M., M.D. The difficulties which beset us were not few, for no sooner was one removed, than another appeared; and it is only to the kindness and attention of our professors, to the interest they always took in our studies, that we can attribute the success which has now crowned our labors. And it is deeply gratifying to me to be able this day to bear public evidence to the fidelity and zeal with which the professors of medicine of this University have discharged the onerous and tedious duties they have undertaken, and to congratulate the under-graduates in medicine on their good fortune in having masters so earnest in furthering the objects common to both, the diffusion of medical knowledge and the obtaining of medical degrees.

It is scarcely necessary for me to remind you, fellow graduates, that the curriculum of studies you have been pursuing during the past four years is but merely initiatory to the more extensive and thorough course of study to which you will henceforth have to devote yourselves. You will find that your past academical life will, in the future, be chiefly of value to you in respect to the lessons you then learnt, to the training you then underwent, and to the habits of patient, persevering and systematic study you then acquired. Experience will have already taught you that that training and those habits have enabled you to obtain much knowledge of difficult and abstruse, and even tiresome and monotonous, subjects in a comparatively easy and pleasant manner; that, insensibly, they have increased the interest, perhaps very slight interest, you originally took in your studies, and that consequently, your books have long since ceased to be bores and have now become agreeable companions. Some of you, indeed, may have even felt surprised by the reflection, if you have happened to think at all on the subject, that the honorable degrees which have just been conferred

upon you gradually lost that sense of vital importance you at first attached to them; that you came to consider them as of no value, or if valued at all, merely as the means to an end and the outward tokens of a certain degree of proficiency in your studies, and that *knowledge itself*, and not your degrees, was what you most earnestly desired to possess. If such has been the feeling that has actuated you during the latter portion of your academical career, I would most strongly recommend you to cherish it. It will be an assurance, satisfactory to your friends and to the professors who have taken and will continue to take deep interest in your progress, and an earnest to yourselves, of your ultimate success in erecting that edifice of lasting renown in your profession, the foundations only of which you have hitherto laid; and which I am sure each one of you anxiously desires to leave behind him, as a memorial to future generations of his endeavors to further the cause of science and improve and add to the means at present in the hands of physicians of diminishing and alleviating the ills to which suffering flesh is heir.

But no mere theoretical knowledge of your profession will be of avail. While you will have to keep up with the advancement of science, and the march of new ideas, as enunciated in the pages of medical journals and other writings of contemporary practitioners, you will have to depend greatly on your own close observation of the never ending phenomena of nature manifested in the various phases of disease as they come under your notice, and your own acuteness in diagnosis and prognosis. In order to show you to what a degree of proficiency it is possible to attain in this respect of close and accurate observation, I may mention a fact related by Archbishop Whately, in a lecture delivered by him on the influences of the professions. The Archbishop said; speaking of a celebrated Surgeon, whose attention had been chiefly directed to cases of deformity: "He scarcely ever met an artisan in the street but he was able to assure himself at the first glance what his trade was. He could perceive in persons not actually deformed, that particular gait or attitude, that particular kind of departure from exact symmetry of form, that disproportionate development and deficiency in certain muscles, which distinguished, to his anatomical eye, the porter, the smith, the horse-breaker, the stone-cutter, and other kinds of laborers from each other. And he could see all this, through, and notwithstanding, all the individual differences of

original structure, and of various accidental circumstances."

It cannot be expected that every one of you will arrive at a like degree of excellence, but you can all strive to approach it as closely as possible. Acute and practised observers, it may be remarked, are not always able to precisely explain the indications that influence their judgment; and if, when called upon you should ever fail to define all the reasons on which your decision may have been based, it may be some consolation to you to learn that it has been justly and happily remarked "he must be an indifferent physician, who never takes any step for which he cannot assign a satisfactory reason."

I do not propose to dwell at all on the duties that the practice of your profession will entail on you. Anything that I can say with regard to this part of a Valedictorian's usual address will be better said, and with more weight, by the eminent professor who will just now address you.

Strongly as I have recommended you to preserve those habits of systematic and diligent study of everything pertaining to your profession, which you have all to a greater or less extent already acquired, I would as earnestly urge you not to confine your studies to your profession. In order to become at all eminent in our profession, it is necessary to possess a superior vigor and order of intellect, combined with great diligence, and another quality, in which bright intellects have often been lamentably deficient, I mean, common sense. It will certainly not prove to be any drawback to your attaining eminence, that you devote some little portion of your time to other studies. Such a course has been recommended by the most profound thinkers of all ages. In the pursuit of some other branch of knowledge, let us say literature, for example, you will find a healthful recreation for your minds, a necessary something that will enlarge your sympathies and excite your faculties to a freer play, that will furnish you with a common bond of interest with men of other callings, that will supply you with common topics and common feelings, and enable you to acquire a more complete and generous education, and to act your part as physicians with better grace and more dignity. It will prevent your being influenced by those narrow prejudices and that illiberality of feeling, with which the exclusive study of one subject, or of one profession, must of necessity infect you: and which, in the days of Harvey and of Jenner led all other physicians to reject the magnificent and most important discoveries of the circulation of the blood and of vaccination.

I have now a very pleasing duty to perform, that of returning thanks to the ladies for their presence on this occasion. There is not any class or body of men more deeply indebted to woman, more fully alive to her sweetening, beneficial and healthful sway, than are physicians. In all the scenes of pain, of sorrow, of sickness and of death, in which it is the physician's lot to daily mingle, he asks for no better assistant, he recognizes no more sympathizing or zealous fellow worker, than woman. It is her gentle presence, the touch of her soft hand, the melodious tones of her low voice, that soothe and cheer the sufferer, and recall him to life, or that make the death-bed easy. Her gentle and assiduous nursing, and her unceasing watchfulness have often proved effectual, in cases where all the physician's skill and science would otherwise have been of no avail. And in our happier moments, amid all the pleasures of social life, her presence and assistance are eagerly sought. I may truly say that the happiness of the graduates would be very greatly diminished, were the ladies absent from the Convocation; and if the delicacy and refinement of their sex will not allow them to mix in the rougher scenes of every-day life, we may be sure that whenever, by their presence, they add brilliancy to public proceedings, the occurrence which wins from them their smiles and approbation is no ordinary one.

Among the many influences which sway the heart and mind of man, and urge him on to undertake toil and endure privation, there is none more general or more powerful than that which the ladies have it in their power to exert. And when by such means he has achieved success and occupies a distinguished position, he finds his chief satisfaction is in being able to share that position with the gentle beings who are dear to him, and their approval his highest reward. Whatever may be the relations in which they stand to us, whether as mother, wife, sister, or sweet-heart, their influence with us is always potent. And as it is in the second of these relations that the ladies have most frequent opportunities of exercising their beneficial influence over the lives and happiness of men, so I trust that those among the ladies present who do not yet stand in that relation, and if I may judge from the many lovely and bright young faces that I see here, I should say they are not few in number, and I would congratulate all bachelors upon that fact, I trust that these young ladies will soon become the happy wives of happy men and fortunate M.Ds.

As the time to which I am limited is expiring, I will now say to our professors farewell. We will

carry with us affectionate recollections of happy days spent with them in our Alma Mater, and we will always look back with pride and gratification to the time when we sat under them as students, drinking deeply at the spring of medical knowledge, and guided and aided by their invaluable experience.

To you, classmates, I would return my warmest thanks for the distinction and honor which you have conferred upon me, and I would also convey to you the earnest assurance that the remembrance of my collegiate days passed among you will ever be reckoned among the dearest and happiest memories of my life.

And now, my fellow graduates, I will bid you one and all an affectionate farewell. We stand here to-day on the threshold of a new life. In a few moments we shall face the world our own masters, nothing undaunted by the heavy responsibilities we have but just now by the oath of office assumed; but confident in our strength and ability to carve a niche in the Temple of fame, and with bright anticipations of success casting a golden hue over our prospective careers. We ignore, to day, the sad experience of others who have toiled slowly and patiently along the path which we feel we could clear with a bound; we will not allow to ourselves that the world has its caprices, fortune her vicissitudes, friendship its insincerities; we will not permit these facts to appall us, or to cast their discouraging influences around us. We will enjoy to the full the triumph that to-day closes our academical career amid the cordial congratulations of relatives and friends and kindly acquaintances, and we will yield ourselves up to pleasant dreams of the future. But, gentlemen, if it should come to pass that those dreams are never to be realized, if it should happen, as no doubt it will to some of us, that our hearts should grow faint during the weary and protracted struggle on which we are now entering, when we find that our dearest and most cherished hopes, our highest and noblest aspirations, are doomed to disappointment and defeat, and great and unsparing toil on our part is but poorly acknowledged and but grudgingly rewarded, let us not even then abandon all hope, let us struggle against the feelings that may then oppress us, let us remember that as we are toiling and suffering, so have others before us toiled and suffered and conquered, as in the end we will conquer; and that there has never lived a man, whose success in life has ever excited the wonder or the envy of his fellow-beings, but has at some earlier portion of his career, felt despair gnawing at his very vitals. Once more, farewell.

Abstract of a Case of Dry Gangrene, by THOMAS SIMPSON, M. D., read before the Medico-Chirurgical Society of Montreal, March, 1874.

A previously active and healthy young woman, aged 19, after a few days of indisposition was seized on the 15th of October last with symptoms which soon developed themselves into acute mania. On 27th she was suddenly reduced to a state bordering on collapse, and on the following day complained of an acute pain in the right foot which was cold; and several ecchymosed looking spots, unaccompanied by swelling, were remarked on the toes and upper surfaces; these gradually ran together, and terminated in dry or mummified gangrene which extended half way up the leg, the process occupying several weeks, during which she remained in a state of violent mania, requiring constant surveillance to prevent her injuring herself and others.

Separation between the living and gangrenous parts slowly took place. She sank into a typhoid condition, again rallied, the mania abated and on the 31st of January the leg was amputated immediately below the knee joint. The bloodless method of Esmarch was adopted and proved eminently successful. The stump healed slowly. The patient has recovered her reason, but not the mental vigor she possessed before her illness.

It was noticed at the first appearance of the gangrene that there was no arterial pulsation in the affected limb, and that the pulsation in the arm of the same side was so weak as to be scarcely perceptible. A short time before the operation, the pulsation in the femoral could be traced only to a point about a couple of inches below Ponpart's ligament.

Throughout the illness the pulse was invariably rapid (120 to 140) and weak. No abnormal sounds indicating structural change in the heart could be detected.

The immediate cause of the gangrene was probably embolism of the femoral. The extremely weak pulsation in the right arm was possibly owing to a similar obstruction. The mania was the only symptom of diseased brain; there was no muscular twitching, convulsion, or paralysis.

The treatment during the early part of the illness consisted in the administration of bromide and of potash and an occasional dose of chloral hydrat when necessary to procure sleep. After the 27th Oct. quinine and phosphoric acid were substituted for the bromide, and morphine for the chloral hydrat. Diet simple, nutritious and easily digested, milk, oysters, &c., with a moderate allowance of fresh fruit.

Progress of Medical Science.

CURE FOR THE TOOTHACHE.

Dr. Henry T. Reynolds, of Baltimore, writes to the editor of the *Medical News* that, for eighteen months he has been using acetate of lead as a remedy for toothache. He finds it better than any of the numerous remedies proposed in the books, and in cases in which it is applicable, the relief is instantaneous. He advises the sufferer to apply from one to three grains to the cavity for a moment or two, then spit it out. It fails in fewer cases than any remedy that Dr. Reynolds ever tried, not more than eight per cent.

PERMANGANATE OF POTASSA IN OXALURIA.

Dr. Thorne, of Chicago, praises in the *Mich. Univ. Med. Jour.*, the use of permanganate in oxaluria. He gives a case and adds:

When we consider the fact, that uric acid may disappear entirely from the urine, and that oxalic acid is not normally present: Is it not fair to conclude that the uric acid must, in the normal condition of things, undergo decomposition in the body? We find that by adding an excess of permanganate of potassa to uric acid out of the body, it is directly converted into urea and carbonic acid; and that when the oxidation is less complete, it passes into the form of urea, oxalic acid, and carbonic acid. If, therefore, we would prevent the formation of uric acid and oxalic acid we must supply, as per example, the seven equivalents of oxygen, and four of water. This is most conveniently done in the form of permanganate of potassa:

R. Permanganate of potassa, grs. viij.
Water, ʒij. M.
Sig.—One teaspoonful to be given three times a day.

It should not be given except on an empty stomach; for, in contact with organic matter, it is decomposed, yielding its oxygen to any element, simple or compound, that will receive it. I have repeatedly directed, during the last two years, the permanganate to be given as above, in oxaluria, with the most happy result.

A BIT OF EXPERT TESTIMONY.

When Orfila, the celebrated French chemist, was on one occasion a witness at a trial for poisoning, he was asked by the president if he could state quantity of arsenic requisite to kill a fly. "Certainly, M. le Président," replied the expert; but I must know beforehand the age of the fly, its sex, its temperament, its condition and habits of body, whether married or single, widow or maiden, widower or bachelor."

MIDWIFERY AND GYNÆCOLOGY.

Fortnightly Hemorrhage during Pregnancy.—

Dr. S. Haynes read the following case of this before the Worcester Med. Soc. II. H., æt. 36, states that in all her pregnancies there has been a hemorrhagic uterine discharge, more profuse than her menses (which are of usual quantity and quality), but of exactly the same nature, every fortnight up to the sixth month, whence, until labor, there has been no loss. Each flux is preceded by a few days' very severe headache, and is accompanied by much dorsal pain and very bad bearing-down sensations. She never has any leucorrhœa. When not pregnant, she has regular monthly catamenia; an abundant discharge every fortnight is therefore her test of pregnancy; this recurs fortnightly for four or five months after each labour; the menses then become natural. She has had seven children: all carried to full time, and born alive and perfect. When she was pregnant with her first, the hemorrhage was so copious that her medical attendant told her the pregnancy could not go on. It was not more abundant then than it has always been since. Treatment, position, and rest, had no influence; so she now takes no extra precautions during her pregnancies. She does not lose much after her confinements, and there are no ordinary indications of hemorrhagic diathesis. She is a stout plethoric woman, who says she "makes blood" very quickly, and that her mother used to be often bled with benefit, and died from apoplexy. I attended her in her last confinement, when I did not find anything unnatural. She objects to any local examination.—*Brit. Med. Journ.*, Nov. 29, 1873.

NOTE ON THE TREATMENT OF CHRONIC CYSTITIS. BY H. S. PURDON, M.D.; PHYSICIAN TO THE GENERAL AND SKIN HOSPITALS AT BELFAST.

The following note of a case of chronic cystitis occurring in a female, may not be uninteresting:—

Mrs. M——, aged about forty, a healthy-looking country woman, residing in the County Down, was admitted into the Belfast General Hospital, under my care, in February last, suffering from chronic cystitis. She is the mother of several children, and attributed her present disease to exposure to cold after last confinement. There was constant desire to make water, and pain over the region of the bladder. The former much worse at night; indeed, she was up nearly every hour, at least, to urinate, and her health was beginning to suffer. Her urine was scanty, ammoniacal, contained a little mucus, and frequently, when the last few drops were being voided, some blood appeared. No tenesmus; bowels regular; appetite pretty good; no thirst. My colleague, Dr. Murney, kindly sounded the bladder for stone; the result was negative. The usual routine treatment was tried in her case, such as *uva ursi*, *pareira brava*, *buchu*, &c. Iodoform vaginal suppositories gave temporary relief, as did also washing the bladder with tepid water and tincture of opium; after some time we tried dilute nitric acid and water, then a mixture containing *copaiba*; and, lastly, *russic*

acid—about eight drops to the ounce of water—was tried. These remedies all gave slight relief, but only temporary, and soon lost their effect. About this time, April, I saw a notice of a paper by Dr. Clemens, of Frankfort, on the Treatment of Chronic Diseases of the Bladder by the Injection of Tepid Normal Urine, and I determined to try this method (after taking my then house pupil, Mr. L., into confidence, and who supplied the necessary normal urine). The urine was injected into the bladder—after being first washed out—night and morning, a few minutes after being made, and whilst quite warm, with the most beneficial results—my patient being discharged, seemingly cured, in some three weeks. She was to return and report, but as she has never done so, I take it for granted that she has remained well. No one in the ward knew of the treatment, otherwise they would have rebelled against it, especially my patient. Dr. Clemens offers the following remarks on the injection of the bladder with normal urine, and which may be interesting to reproduce. His paper first appeared in the *Deutsche Klinik*, No. 7. He says that:—"About four years since, in a very bad case of the disease of the bladder, in which this organ had been for months in contact only with decomposed and stinking urine, the idea occurred that advantage might accrue from introducing into the bladder urine with its normal proportion of uric acid. The experiment succeeded so well in this and some other cases that I became convinced that the urine in question formed a better material than the most esteemed injections. The bladder having been completely emptied by the catheter, from six to eight ounces of luke-warm distilled water was thrown in, and retained for about five minutes. After this had been removed, some tepid water is again slowly injected and retained for some minutes. A young and healthy individual now passes water into the syringe, which has been previously raised in warm water to a temperature of 25° R, and this is then immediately injected into the bladder, and left in for a longer or shorter time. The impression made by this normal blood-warm urine of a young and strong man—the temperature of which is generally higher than that which has issued from the diseased bladder—is sometimes in the highest degree favourable, so that in one case a single injection has been nearly curative." Whether this plan of treatment will prove successful in every case remains to be proved; however, it was useful in the one recorded. Probably chloral, or what has been called meta-chloral, might be tried instead, for, according to Dr. Dujardin-Baumetz, of Paris, chloral possesses the property of preventing decomposition of the urine; and Dr. Baumetz thinks that in certain diseases of the bladder it may be usefully injected into that viscus.—*Dublin Medical Press*.

TO DISGUISE CASTOR OIL.

Rub up two drops oil of cinnamon with an ounce of glycerine, and add an ounce of castor oil. Children will take it and ask for more.—*Druggists' Circular*.

A KNIFE SWALLOWED AND PASSED THROUGH THE ABDOMINAL WALL, AFTER AN INTERVAL OF NINE WEEKS.

A female twenty-six years old, during an attack of delirium tremens, swallowed a dessert knife, the metal part of which measured six inches and a half. Eight weeks later a globular swelling made its appearance in the right side, nearly on a level with the umbilicus, and the sharp edge of a foreign body could be felt distending the skin, which was freely movable over the tumor. After some days the blade of the knife protruded through the skin, and was easily removed by slight traction without additional incision. The ivory handle had been entirely digested, and the extremity of the blade was rendered very thin by the action of the gastric juice. The nervous shock was considerable at the time of the removal of the offending body, but a good recovery was made without the formation of a gastric fistula.—*Lund: Liverpool and Manchester Medical and Surgical Reports, 1873.*

BILIOUSNESS.

Some day we may arrive at definite ideas respecting the conditions included under this term. At present it is employed to mean almost any derangement of the chylipoetic process. In consequence of some experiments lately made in Germany, by injecting cholesterine into the circulation of animals, Professor Austin Flint, jr., who had long previously worked at the subject, has re-stated his views before the New York Academy (*Med. Record, Dec., 1873*). He says the elements of secretion do not pre-exist in the blood; but those of excretion do, and they are separated, not manufactured, by glands. He finds that cholesterine is always present in the blood, which gains twenty-three per cent. of this substance by passing through the brain, and loses as much by passing through the liver. He concludes, therefore, that it is excrementitious—formed in the nervous system, and removed by the liver. If this organ becomes disorganized, it accumulates in the blood; and the term cholesteræmia is justifiable. Having been separated by the liver, the cholesterine in the bile passes into the intestines, and there changes into stercorine, of which some ten grains daily are discharged.

Dr. Barker alluded to the several sluggish conditions termed "biliousness," and which had also been called "cholæmia," though they have never been properly explained. But, if cholesterine be really the effete debris of nerve-tissue, we can certainly understand the torpor, headache, and some other symptoms that appear to arise in over brain work. Dr. Barker, too, has found convulsive cases sometimes depend, not on uræmia, but, perhaps, on cholesteræmia; and he has been successful by diverting attention to the liver, rather than the kidneys. Dr. Barker's name is a sufficient guarantee for his clinical acting; and it appears to us that the question of acting upon the liver is still one to be entertained, or at any rate, that imperfect function of that organ may give rise to disease.—*The Doctor.*

PEMPHIGUS.

Picot (*Jahresbericht Gesammten Medicin, 1873, from Gaz. des Hop.*) strongly recommends the treatment introduced by Hillairet, and which resembles that for burn, described in the last semi-annual report. It consists in applying to the affected skin, bandages soaked in a liniment of oil and lime-water. In the two cases reported by him, the bullous eruption extended over nearly the whole body, and was accompanied by severe itching. The fever was considerable. Both patients were bound up, from head to foot, in wadding, soaked in the preparation, which was daily changed. The general condition improved, the temperature sank without internal medication, and, later, the fever entirely disappeared. The excoriations, arising from the bursting of the bullæ, quickly dried, and healed in a short time. In one of the cases, no new bladders appeared after six weeks, while, in the other, perfect recovery only followed in two and a half months. In the latter case, a new eruption immediately followed a few days' interruption of the treatment. Hillairet has pursued this method for two years, in eight or ten cases, and always with similar results. In two cases of pemphigus foliaceus, it was less favorable.—*Boston Medical and Surgical Jour.*

A REPORT ON THE PROGRESS OF OBSTETRICS AND OF GYNÆCOLOGY.

By WILLIAM GOODRILL, M.D.

From Transactions of Medical Society of State of Pennsylvania, 1873.

THE ABORTIVE ACTION OF QUINIA.

The thrice-vexed question of the action of quinia upon the uterus has claimed a large share of attention. That this agent does sensibly excite uterine contractions can hardly be doubted; the evidence on this point is overwhelming. Yet it is uncertain whether the few reported cases of abortion under its use have been owing to this action, or to the paludal poison for which it was prescribed. The testimony here is so conflicting, that the *Societe de Medicine*, of Gand, Belgium, has proposed the subject as a prize essay for 1874. After carefully weighing the evidence of his own experience and that of others, your reporter has arrived at the following conclusions: 1. That quinia, by producing intermittent contractions of the womb, has, in large doses, occasionally brought on an abortion in the very early months of gestation. 2. That it should not on that account, however, be withheld from pregnant ague-patients; for, other things being equal, an abortion is more likely to be induced by the visceral congestions and muscular succussions attending an attack of ague than by the oxytocic property of the antiperiodic. 3. That the uterine action of this drug is too slow and too uncertain to be relied upon in the emergencies of ante or post-partum hæmorrhages. But that, in decided doses, it will often prove of service in menorrhagic or

metrorrhagic attacks. 4. That, like ergot, it acts most efficiently after labor has begun; a dose of ten grains being usually followed, in inertia, by a prompt return of the pains. 5 That, apart from its tonic and antiseptic properties, quinia is *par excellence* the remedy for puerperal disorders. By lowering the high temperature generated both by accelerated molecular metamorphosis and by rapid chemical combinations, it retards the oxidation of the tissues, hinders the formation of fibrinous concretions, and, therefore, prevents cardiac plugging. By contracting the walls of the womb, it tends to keep the protective coagula of the uterine sinuses from becoming loose and soluble, and to inhibit putrid and purulent absorption. Both by constringing the coats of the capillary system of blood-vessels, and by paralyzing the amoeboid movement of the white blood-corpuscles, it presents, in puerperal fevers, an obstacle to fibrinous exudation and to the migration of the leucocytes into serous cavities.

REMEDY FOR CHRONIC HOARSENESS.

An eminent physician of Philadelphia contributes the following: In chronic hoarseness, arising from thickening of the vocal chords and adjacent membrane, the ammoniated tincture of guaiacum is often a very efficacious remedy. It may be appropriately mixed with equal parts of the syrup of senega, and a teaspoonful of the mixture given two or three times a day.—*Amer. Frac.*

EXTENSIVE USE OF ETHER FOR ANESTHESIA.

Since the introduction of ether as an anesthetic it has been used in the Massachusetts General Hospital in 15,000 cases, with an average of half a pound to a patient. In one case four and a half pounds were used in twelve hours.

WHOOPIING COUGH.

The following two formulæ are highly recommended in this disease, by writers in the *Lancet*.

R. Chloral hydrate,	gr. xij.
Ipecacuanha wine,	℥ j.
Syrup of orange,	℥ ij.
Peppermint water,	℥ jss.

To a child three years old, one teaspoonful of the above mixture should be given every four hours.

R. Bromide of potassium,	gr. xxx.
Dilute hydrocyanic acid,	M v.
Tincture of conium,	℥ j.
Syrup of squills,	℥ iij.
Water,	℥ ij.

Two teaspoonfuls to be taken every four hours.

PHOSPHORIC EMULSION.

Dr. G. M. Beard (*Archives of Scientific and Practical Medicine*) recommends as a restorative tonic in certain diseases of the nervous system, a combination of cod liver oil with phosphoric acid. The following is his formula:

R Vitelli ovi,	No. j.
Ol. morrhue,	℥ ij
Vini xerici	℥ iss
Acidi phosphorici dil,	℥ iij
Syrupi simplicis,	℥ v
Aq. amygdal. amar,	℥ iv.

Rub the yolk of the egg very thoroughly in a mortar, adding the oil little by little. Then add and incorporate the other ingredients *secundum artem*, the phosphoric acid being added last of all. When properly made the taste of the oil is nearly annihilated, and the emulsion will keep a long time. The dose of this emulsion is a tablespoonful. The quantity of wine and of phosphoric acid may be varied to suit individual cases.

Dr. Harlingen gives the following formula, which he recommends highly in the treatment of chronic eczema accompanied by itching:

R. Oleo-stearate of zinc (dry),	3 parts.
Mutton suet,	15 parts.
Oil of sweet almonds,	15 parts.

Slowly incorporate the oleo-stearate of zinc with one part of the oil of almonds, in a slightly warmed porcelain mortar, and add, little by little, the melted and partially cooled mixture of the remainder of the oil with the suet.

REMOVAL OF GLASS STOPPERS.

It may not have occurred to every one—at all events it is not noticed in any of our treatises on practical pharmacy—that the easiest way to take out a stopper which has become fixed in the neck of a bottle is to reverse the motion given to it when putting it in, that is, to knock the stopper from *right to left*. In most instances when a stopper is fixed, without the intervention of an adhesive substance, it is by turning it as one would drive a screw. The direction is almost invariably from left to right, and thus a thread is formed, which is easier to follow backwards than to break. The trouble with which the removal of stoppers is usually attended must form my apology for introducing a suggestion of so little apparent importance.

HOW TO SWALLOW A PILL.

The *Chicago Medical Times* is responsible for the following:—"Put the pills under the tongue and behind the teeth, and let the patient immediately take a large swallow of water, and he will neither feel the pill nor taste it. In fact, they cannot tell where it has gone, and I have seen them look about the floor to see if they had not dropped it."

FRECKLES.

The following lotion is recommended for the removal of freckles:—

R Hyd. perchlor.....	gr. v.
Acid hydrochlor.....	gtt. xxx.
Sacch. alb.....	℥ i.
Spt. vini rect.....	℥ ij.
Aquæ rosæ.....	℥ vij.
M.	

LOTION OF ACETIC ACID FOR BALDNESS.

The following lotion is said to be superior for a shampooing liquid, for removing dandruff, and useful and pleasant application for baldness. It is, of course, moderately stimulating, and in those cases in which the hair-follicles are not destroyed, but have become merely inactive, we should think it might prove both efficacious and agreeable:—

Take an acetic acid.....	1 drachm.
Colonge water.....	1 ounce.
Water, to make in all.....	6 ounces
M.	—Exchange.

SINAPISMS.

In making a mustard plaster, use no water whatever, but mix the mustard with the white of an egg, and the result will be a plaster which will "draw" perfectly, but will not produce a blister even upon the skin of an infant, no matter how long it is allowed to remain upon the part.—*The Medical Brief*.

GLYCEROLE FOR CHAPPING OF THE SKIN.

R Oxide of zinc.....	gr. xx.
Tannic acid.....	gr. xv.
Glycerine.....	℥ ix.
Tincture of benzoin.....	℥ ss.
Camphor.....	gr. xv.
M.	

THE PLAY AND THE AFTER PIECE.

Douglas Jerrold at a party noticed a doctor in sober black waltzing with a young lady who was dressed in a silk of brilliant blue. "As I live!" exclaimed the wit. "there is a blue pill dancing with a black draught." It may not be out of place to relate the following:—Douglas Jerrold accompanied the late Mr. Wakley to witness some operations at the Royal Free Hospital. The first operation was amputation of the leg; the second was a minor one for the removal of piles. Mr. Wakley told the wit the nature of the operation, and thought it was not worth his time to stay to observe it. "Oh!" said Jerrold. "I have seen the 'play,' and I would rather wait to see the 'after-piece.'" We believe this little episode with respect to Jerrold is now made public for the first time.—*Times and Gaz.*, Nov. 22, '73.

ONYCHIA MALIGNA.

Rest and attention to the state of general health having preceded, the fungous growth is then burnt with strong nitric acid, washed with water, and poulticed. The relief is certain, and the repetition of the application seldom necessary. If there should be any trouble with the nail, the tender flesh may be protected by the insertion of a thin piece of compressed sponge, kept in its place by strips of plaster applied longitudinally to avoid compression.—*British Medical Journal*.

TREATMENT OF BURNS AND SCALDS.

Dr. de Breyne highly recommends the following treatment in *L'Union Pharmaceutique*; Hydrate of lime (newly precipitated), forty-five grains; glycerine, five ounces; chloric ether, forty-five drops. It makes up a transparent, colourless liquid, with an agreeable odour, and an alkaline reaction, according to the dose of hydrate of lime. It calms the pain, and prevents or abates inflammation.—*Lancet*, Oct. 18, 1873.

THERAPEUTICAL NOTES.

SYKOSIS.

This troublesome affection is treated in the Cantstatt hospital by *acetic acid*. The beard is cut short, scabs are removed by poultices, the parts are for several days anointed with tar ointment, and the hairs plucked out, and then the acetic acid painted over the diseased surface. It is painful, but usually one application is enough.

POWDERED COAL-TAR FOR WOUNDS.

M. Magnis-Lahens, of Toulouse, adds charcoal to coal-tar (33 per cent. of the latter), and thus obtains a light and porous powder, which does not irritate wounds, and which is easily washed off with cold water. This combination is a very useful mixture of two antiseptic substances. The charcoal absorbs the gases formed by fermentation, coagulates the albumen, and prevents its decomposition; thus effectually assisting the carbolic acid contained in the coal-tar.

QUININE AND BLISTERS IN PNEUMONIA.

Dr. Payne, in the *Southern Med. Record*, recommends large blisters to the chest, and from 20 to 30 grain doses of quinine twice or thrice a day in the treatment of pneumonia when it has reached the stage of hepatization. He claims for this plan of treatment greater success than is usually obtained by the ordinary methods. He gives a report of several very bad cases successfully treated in this way, and mentions one case that was given up by a Medical friend, that made a rapid recovery after the application of the blister, and one dose of quinine.

PROCEEDINGS OF THE DUBLIN OBSTETRICAL SOCIETY.

The Preventive Treatment of Post-partum Hæmorrhage. By A. H. MCCLINTOCK, M.D., &c. &c.

The subject of *post-partum* hæmorrhage is one of such vast importance, and of such deep practical interest, that its introduction here can never be out of place. It is, moreover, one of those subjects on which every one of us must have had more or less experience, and, therefore, have somewhat to say about it. I am not going, however, to treat of it *in extenso*, but merely to consider the prophylactic measures which may be employed where we have reason to expect the occurrence of flooding, consequent upon the birth of the child.

There are certainly two, and probably three, conditions which influence the production of hæmorrhage after delivery; one of these, and by far the most important, is the muscular contractility of the womb. Another is the state of the circulation at the time of delivery. The more free the patient be from vascular excitement the less firm need be the amount, or degree, of contraction of the uterus that will suffice to resist the escape of blood from the utero-placental vessels. This must be self-evident, and yet recent writers on the anticipation and prevention of *post-partum* hæmorrhage take no notice of this element in the production of the flooding. A third condition there is, whose influence must not be altogether ignored, and that is the coagulable power of the blood itself. This property, I fully believe, plays some part, though probably a subordinate one, in arresting sanguineous discharges from the womb after labor, as well as at other time.

Keeping these fundamental principles before us, let us proceed: and first, with regard to the premonitory symptoms of the hæmorrhage in question. Vascular excitement towards the end of gestation and during labor, always forebodes hæmorrhage. Madame La Chapelle seems to have been well aware of this, but the author who lays most stress upon it, and has most ably pointed out and illustrated its influence, is Gooch. Hæmorrhage after delivery, attributable to this cause, Gooch describes as "a peculiar form of hæmorrhage;" but the correctness of this title may justly be questioned, "for though it possesses some features which distinguish it from the ordinary attacks of flooding (solely referable to atony of the uterus), yet they are not sufficient to constitute any essential difference, or materially to affect the practice that is to be pursued for its suppression."*

I confess I always feel uncomfortable when I find the pulse permanently rapid and jerking towards the end of labor, especially if the uterine action be wanting in strength; and under such circumstances I endeavor, as far as time will permit, to adopt precautions against hæmorrhage, and to have every available resource in readiness to suppress it. I very well remember the late Dr. Labatt, a man of great expe-

rience and sagacity, impressing on me the importance of attending to this symptom after delivery. He said that whenever he found the pulse to range above 100 at this critical period, it led him to look out for flooding or convulsions, and to be in no hurry leaving the patient's house.

It very seldom happens we can foretell, during gestation, that the uterine contractions will be inefficient, except by the experience of the woman's past labors. The presence of any tumor in the uterus, however, might lead us to fear this result, and I have published a case of this kind where fatal hæmorrhage succeeded to delivery.† In like manner, unusual distension of the uterus from plurality of fœtuses, or from dropsy of the amnion, might awaken an apprehension in our minds that hæmorrhage *post-partum* would be apt to take place. Levret held precisely the same opinion, for he says that, on all occasions when we see a patient extremely large, we must carefully guard against a too rapid delivery; and he points out very clearly and distinctly how a sudden emptying of the uterus—as when the child and waters are discharged at the same time—favors the production of hæmorrhage.

In the progress of labor, and especially in the second stage, the character of the pains affords a very reliable indication as to the probability of hæmorrhage. This every accoucheur of any experience must have observed. Both Dr. Whittle and Dr. Atchill pointedly allude to this premonitory symptom. "The pains," writes Dr. Whittle, "are of this kind—they are strong and quick; they do not gradually culminate into a strong pain, and subside again, but they are sharp, quick, and cease almost suddenly; and the intervals between the pains are long in proportion to the length of the pains."‡ Such pains as these he regards as very sure fore-runners of flooding, and in this I quite agree with him, and think Dr. Whittle has done good service in directing the attention of practitioners to so reliable and so obvious a precursory symptom of hæmorrhage. In a subsequent communication he tells us that the above description was not intended for cases in which the uterus had become exhausted by prolonged labor, nor does he think the same mode of treatment would be at all applicable to the two cases. I have frequently had occasion to observe, and I am sure there are many here whose experience can corroborate what I am about to say, that extreme mental depression (whatever may be its cause) can exert a somewhat paralyzing influence upon the uterus. The free administration of chloroform, too, very often does the same, but not always, whilst there certainly are some women in whom this anæsthetic has quite the opposite effect: these latter patients, I have remarked, are keenly susceptible to pain of any kind, and the intense terror and agitation which the labor pains create in their minds prove a psychological cause of derangement in the function of the uterus (analogous to what may occur with regard to the functions of other organs of the body.) Now, by

† Clinical Memoirs on Diseases of Women, p. 116.

‡ Brit. Med. Jour., 27th Sept., 1873.

* M Clintock and Hardy's Midwifery, p. 217.

the exhibition of chloroform this source of disturbance of the uterine action is at once removed. Except in these special cases, however, I would not use chloroform in any instance where there was reason to dread the occurrence of flooding.

It must be admitted that not a few cases of *post-partum* flooding present themselves without any warning whatsoever, and where consequently we could not have anticipated it unless by the experience of the woman's previous labors. If flooding followed delivery in any former confinement, it should then be our duty to adopt precautionary measures against it, and at the same time be prepared to meet it.

The prophylactic measures against *post-partum* hæmorrhage are based on the principles I have just endeavored—though very briefly—to point out. It is always desirable that the circulation should be not only free from excitement, but, moreover, not in an excitable state when labor comes on. "That disturbance of the circulation," writes Mr. Robertson, "plays an important part in uterine hæmorrhage, and that it consequently deserves the especial attention of practitioners, is most true." In cases where the history of the patient's previous labors lead us to apprehend flooding, attention to the pulse is of paramount importance. To secure the desiderated quietude of the vascular system, all that is required in ordinary cases is open-air exercise, abstinence from stimulants, and regularity of the bowels; in addition to these means, we might give digitalis and cooling medicines; and in full plethoric persons, I have no doubt the abstraction of blood from the arm, as recommended very strongly by La Chapelle (and at one time commonly resorted to in the management of pregnancy), would be very serviceable. Although the use of the lancet is still out of favor—or rather out of fashion—I am one of those who believe it will yet regain its true place as one of the most potent of our therapeutic agents. To Dr. Gooch belongs the merit of directing the special attention of practitioners to the important part which the circulation plays in the production of *post-partum* flooding, but I long ago expressed doubts of the propriety of styling the hæmorrhage where this symptom is prominent "a peculiar form of hæmorrhage,"* as it does not differ essentially from hæmorrhage the result of simple atony of the uterus, and, once it sets in, is to be treated on the same principles.

We occasionally meet with pregnant patients in whom rapidity of the circulation depends on causes quite the opposite of plethora or over-sanguification. Here a line of treatment, totally differing from that above described, must be pursued.

Where the premonitory symptoms, or the result of previous labors, furnish grounds for expecting hæmorrhage, there are two means which should be employed in addition to the slow extraction of the fœtus, and following down of the uterus with the hand, &c. These two are, letting off the liquor amnii by artificial rupture of the membranes, and the adminis-

tration of ergot of rye. That the discharge of the waters early in the second stage increases the energy of the pains, and favors the tonic contraction of the uterus after its contents have been expelled, not only coincides with every-day experience, but is in accordance with the well-established law of uterine contraction, that to be permanent and enduring it must be gradual and not sudden. The principle, then, on which this practice rests, is perfectly clear and rational, and the practice itself has been recommended by many obstetric writers, some of them of the highest eminence. Both the principle and the practice deduced from it were clearly and fully described by Levret over 110 years ago. Dr. Robert Lee, in his lectures upon Midwifery, published in 1839, (in *London Medical Gazette*), very strongly advocates rupturing the membranes early in labor where we have reason to fear *post-partum* hæmorrhage, and he narates some striking examples of the good effects of the measure. That so comprehensive a writer as Dr. Churchill should make no mention of the practice in question appears to me very strange, and supplies some palliation for the complete silence of Dr. Whittle and Dr. Atthill on the same point. The time to select for this puncture of the membranes is when the os is nearly fully dilated—the presentation, of course, being known to be a head or pelvic extremity. It is important for the success of the measure that the waters drain off, and to aid in this object it may be requisite, as Lee points out, to push up the head during a pain.

Where hæmorrhage after delivery is threatened, Levret advises the patient to be restricted to a lying posture from the beginning of the labor, in order, as he says, to guard against acceleration of the process; but another advantage from this precaution, which Dr. Dewees pointed out, is that it tends to keep the circulation more tranquil. Denman gives quite the opposite advice. He writes:—"When from former events there is reason to be apprehensive of hæmorrhage subsequent to the exclusion of the placenta, that has been altogether prevented, or very much lessened by delaying the time of the patient's going to her bed till the child was upon the point of being born, or even suffering it to be born while the woman sat upon the lap of one of her attendants." Great though my respect is for the authority of Denman, still I must candidly admit he leaves himself open to the severe but just criticism which Dr. Dewees pronounces on this piece of advice:—"Now," Dr. Dewees writes, "we would ask any one at all conversant with the economy of the uterus during and after labor, how an erect position, and the sudden evacuation of the waters at the moment the child was about to be born, can possibly contribute to the only circumstance at all available in the case under consideration—namely, the permanent contraction of the uterus? In the first place, an erect position will always be attended with a quicker circulation than a recumbent one; it will permit the waters to escape with more suddenness and rapidity than a horizontal and, consequently, the risk of atony must be increased."

In Dr. Hardy's and my "Midwifery," we devote

* M'Clintock and Hardy's Midwifery, p. 217.

a few pages to the consideration of the "prevention of hæmorrhage after delivery;" and, having noticed the recommendation of Dewees, to "rupture the membranes as soon as the labor is active, and the os uteri sufficiently dilated, or easily dilatable," we go on to say—"as regards breaking the membranes, we cannot speak from experience. The proposal, certainly, seems a rational one, and well calculated to promote the object in view, but should not be acted upon, we think, without mature consideration, and taking all the circumstances of the case into account: it has, however, the sanction of Dr. Lee to recommend it." It is twenty-six years since I penned the passage just quoted, and I now can say that I have adopted the precaution there described on very many occasions, and am fully persuaded it is a most valuable, and always a feasible, auxiliary in the prevention of flooding after delivery; and Dr. Dewees, from "many years of experience," was convinced it is the principal means to be relied on for preventing hæmorrhage.

Of all the resources, however, against *post-partum* flooding, I believe the most effectual to be ergot of rye. The possibility of the ergot exerting some hurtful influence on the child need not deter us from its employment in these cases, for, if the ergot fail to excite uterine contractions, the child will most assuredly be no way influenced by it;* and if the drug produce the desired effect on the uterine muscles, delivery will in most cases take place before danger can arise to the child—and if not, we have the alternative measure of the forceps, which can safely be resorted to.

Who first employed ergot for the purpose of averting hæmorrhage, I cannot say. It seems highly probable that, soon after the peculiar properties of the drug became known to accoucheurs, it would be so used. I find Dr. Dewees gave it with this intention in a case related in the fourth edition of his "Midwifery," published in the year 1830.

When I was assistant to Dr. Charles Johnson, at the Lying-in Hospital, I frequently saw ergot given as a preventive of hæmorrhage. It used to be administered at one of three periods, viz., when the head was on the perinæum, or immediately after it had cleared the vulva, or after the expulsion of the fœtus, and as soon as the insertion of the cord into the placenta could be felt.

"By giving ergot before the child has been expelled," writes Dr. Hardy,† some time may be gained, but should the placenta be morbidly adhering to the uterus, the difficulty of introducing the hand for its removal will be greatly increased. By adopting the third plan, this source of apprehension is avoided. To this method it may be objected that much time will, perhaps, elapse, and a considerable quantity of blood be lost, before the ergot is administered; nevertheless, the possibility of the placenta being morbidly adherent should be ever present in

the mind of the practitioner, and deter him from resorting to a measure which may so greatly augment the danger of the complication." Thus wrote Dr. Hardy in 1845, and the opinions therein expressed I held in common with him. But all my later experience has convinced me that, to be of real service, the ergot must be given some little time before delivery; and, also, that the objection he advances against this mode, is practically of no weight, inasmuch as morbid adhesion of the placenta is a very rare occurrence. Dr. Whittle's plan is to administer, as soon as the os uteri is fully dilated, a full dose (that is, one teaspoonful) of a liquid extract of ergot twice the strength of that of the Pharmacopœia. This is exactly equivalent in strength to what I myself give, viz., two drachms of the liquid extract of the British Pharmacopœia—a preparation I have used for some years back to the exclusion of all others, and which very seldom fails to produce the specific effects of the medicine on the uterus. In dealing with primiparæ, Dr. Whittle very properly cautions us not to administer ergot until the soft parts are pretty well dilated, as well as the os uteri; and to give the drug in much smaller doses, as it sometimes acts with unusual energy in primiparous women.

In a paper published, May, 1846, the late Dr. Thomas E. Beatty—so well known and respected in this Society—relates his experience and his impressions as to the value of ergot under the particular circumstances we are now considering, and he states he had been in the habit of administering *secale cornutum* "immediately upon the birth of the child, and before hæmorrhage takes place." On analysing his cases, I find that in five, out of the seven which he details, the medicine was actually given some twenty or thirty minutes *before* the expulsion of the fœtal head; so that it is fair to assume his more usual practice was not to wait for the child to be born before administering the prophylactic. His concluding remarks are so apposite that I must be allowed to borrow them:—"The cases I have adduced are, I think, sufficient to show the value of the practice I would wish to recommend. They are, in my mind, convincing proofs of the efficacy of the *secale cornutum* as a means of preventing one of the most formidable evils we encounter in obstetric practice. Indeed, my confidence in it is so great that I now fearlessly undertake the management of cases which, without such aid, we all dread to encounter. It appears to me," he continues, "that the ergot prevents uterine hæmorrhage after delivery in two ways; first, by inducing a complete and permanent contraction of the uterine fibres, thus causing constriction of the blood vessels; and, secondly, by diminishing the force and frequency of the heart's action, and thus rendering the effusion of blood less impetuous and more easily restrained. In all cases where this medicine is given in a full dose, it has the effect of moderating the action of the heart." This lowering effect of ergot upon the pulse had previously been noticed by Dr. Hardy, in the paper from which I have already quoted, and no doubt it contributes, as Dr. Beatty points out, to the hæmostatic action of ergot on the uterus. In these cases of

* That the action of ergot on the fœtus is mechanical and not physiological, I have endeavored to show in a paper read before this Society, and published in *Dub. Quar. Jour.*, May, 1865, p. 484.

† *Dublin Quarterly Journal*, May, 1845.

apprehended flooding, whilst it is most important to maintain a moderate compression of the uterus with the hand, it is, at the same time, desirable that we should not be in any hurry to press off the placenta; but wait for ten or twenty minutes, so as to give the uterus time to recover from the strong efforts required to propel the fœtus into the world. Should hæmorrhage come on in the mean time this rule may have to be departed from.

Dr. Atthill seems to avow himself an advocate for the forceps in preference to ergot as a means of averting hæmorrhage. Every one must admit that a patient will be less liable to flooding if delivered before her system is exhausted and the muscular irritability of the uterus worn out; but in the present day there is little danger of this happening, as the forceps is so frequently and so promptly resorted to in the management of labors, that any additional incentive to its early employment is assuredly superfluous. In point of fact, it is not after tedious labors that hæmorrhage is most apt to occur, but rather in those where there is little resistance to the expulsion of the child, and where, consequently, the second stage is brief in duration. The short, inert pains which prognosticate hæmorrhage, arise from what we may call idiopathic atony of the womb; and here the use of the forceps without previous stimulation of the uterus, would be directly calculated to induce the very danger we would avert; whereas, if we stimulate the torpid uterus first (by rupturing the membranes and by ergot), there will rarely be any need for a subsequent recourse to the "iron hand."

In a former part of this communication I threw out the suggestion that some deficiency in the coagulating property of the blood might probably be a predisposing cause of *post-partum* flooding. On this principle, whether it be correct or not, I have sometimes given gallic acid for days or weeks previously to the setting-in of labor, and have reason to think well of the practice. In the same way, I think we are to explain the good effects which Dr. Bassett. (of Birmingham,) attributes to a course of iron. He writes (*Brit. Med. Jour.*, 22nd Nov., 1873):—"After an active experience, extending over five-and-twenty-years, and a very careful examination of all the circumstances surrounding *post-partum* hæmorrhage, I have arrived at the conclusion that the best method of anticipating it is to prepare the patient for her confinement by a course of medical treatment extending over a period of from four to six weeks, the basis of such treatment being the administration of iron."

In the way of preparative treatment of this kind, Denman says that in those who have suffered from hæmorrhage in their former labors, he "has recommended their taking some tonic medicine, as one grain of zincum vitriolatum two or three times a day for several weeks before the time of their delivery, and the use of the cold bath throughout the latter period of pregnancy, even to the day of their delivery."

The Vice-President (Dr. Atthill) said there were several points in Dr. McClinton's valuable and interesting paper which ought to be specially discussed.

Dr. McClinton referred to the rate of the pulse as being, in addition to the peculiar pains observed by Dr. Whittle, a premonitory symptom of impending hæmorrhage. He (the Vice-President) had no hesitation in bearing testimony to the accuracy of this statement in a certain class of cases. The condition of the pulse was sometimes a very important indication. A quick pulse in labor occurred in connexion with two very different classes of patients—namely, in those who were of full plethoric habit and in those who were in an anæmic condition, with an easily-excited and easily-exhausted nervous system. Now, as far as his experience went, he had not seen that the quick pulse of a plethoric woman was an indication of *post-partum* hæmorrhage—in other words, he did not think that women of plethoric habit, in whom a quick pulse existed during labor, were more liable to hæmorrhage than other females. Possibly in these women the blood might possess a higher degree of coagulability than in women of a different constitution, but certainly he did not look on a quick pulse in an ordinary plethoric woman as an indication of any great importance. On the other hand, when he met with a quick pulse in an anæmic woman of feeble muscular habit, he regarded it as an important index, but then he considered it as an indication of nervous exhaustion which, in the paper alluded to by Dr. McClinton, he (Dr. Atthill) had pointed out as a cause of *post-partum* hæmorrhage. The mental depression alluded to by Dr. McClinton was nearly always marked by a quick pulse, and was but another phase of nervous exhaustion. Dr. McClinton was mistaken in supposing that he (Dr. Atthill) recommended the forceps in preference to ergot in the class of cases under consideration. He was not aware that he had ever treated a patient in whom he anticipated *post-partum* hæmorrhage with the forceps alone. He invariably administered ergot first, and then, if necessary, delivered the patient with the forceps. He did not give ergot to cause the expulsion of the child. He gave it, as Dr. McClinton rightly laid down, for the purpose of stimulating the uterus to contract, and he was always prepared to use the forceps if delivery did not rapidly occur; and in these cases of exhaustion of the uterus, that was seldom the case. He thought the forceps a valuable aid to the ergot in these cases. He would take the liberty of quoting from his (Dr. Atthill's) paper, referred to by Dr. McClinton, (*British Medical Journal*, 1st November, 1873):—"In fine, give ergot in cases of labor in which you suspect that *post-partum* hæmorrhage is likely to occur, but do not rely on it exclusively; when symptoms, indicating that the power of the uterus is flagging, show themselves, prevent the exhaustion becoming excessive by the use of the forceps; when you do apply them, use them as *aids* to the uterus, not as *substitutes* for its action." "Use the forceps *judiciously*, and you will seldom have any hæmorrhage. Here, however, I would protest, as I did at the meeting of the Association, against the injudicious and indiscriminate use of the forceps. Judging from published returns, I believe that not a few practitioners apply the forceps simply to save time and to free themselves from an irksome delay."

Lamentable consequences must certainly follow such a practice." These passages accurately expressed his (Dr. Athill's) views. With respect to early rupture of the membranes, he wished to say that he never administered ergot without rupturing of the membranes previously. He had made this an invariable practice, without being aware of the recommendations of Drs. Hardy and M'Clintock to rupture the membranes as soon as the os was fully dilated, and he thought that was a practice which should always be carried out.

He (the Vice-President) had laid it down, in his paper "On the Anticipation of *Post-partum* Hæmorrhage," that the too rapid evacuation of the uterus, whether naturally or by injudicious extraction by the forceps, or a too rapid expulsion of the placenta, might produce *post-partum* hæmorrhage; but that case was different from the hæmorrhage caused by the exhaustion of a long labor. All of them had seen cases where the uterus was exhausted even after a labor that had only lasted a few hours. There was one other point which had not been alluded to by Dr. M'Clintock, and that was, that *post-partum* hæmorrhage was often induced by the injudicious management of the third stage of labor. He believed that a large number of cases of *post-partum* hæmorrhage were caused by the too rapid extraction of the placenta, a practice which was too generally carried out, and to which he strongly objected. Dr. Denman, in his admirable work, stated he had tried experiments to see whether any harm would follow from leaving the placenta for a considerable time in the uterus. He found no unfavorable results to follow, and he laid it down as an axiom that the placenta might be left in for four hours. Four minutes would, Dr. Athill thought, be nearer the time the placenta was now, in general, left in the uterus; but he considered a medium between the two extremes should be adopted. In his opinion no attempt should be made to remove the placenta for at least fifteen minutes after the expulsion of the child. Even that, he thought, was often too soon. He always kept his hand on the fundus until the after birth was expelled. Doubtless the pain that expelled the child frequently also detached the placenta, but it seldom expelled it, and he thought nature intended it to be left for a time in the uterus to cause that organ to contract. Many practitioners, for the sake of getting rid of the trouble of being kept at the bedside of the patient, removed the placenta immediately after the birth of the child. If this practice be adopted, it should be done by pressure and not by traction. Dr. Mathews Duncan pointed out that when traction was employed the placenta acted like a piston, and drew blood from the uterus.

Dr. Churchill said that perhaps the omission in his book arose from the fact that he took it for granted that the membranes either had ruptured, or had been ruptured at the beginning of the second stage. He thought, perhaps, Dr. M'Clintock meant that they should be ruptured a little earlier, before the first stage was completed. He thought there was a slight want of precision in speaking of the quick pulse, and he should like to insert a word in the

paper—viz., "permanent quickness." A great many years ago he read a paper before the Society upon the variations of pulse during labor and after delivery; and he remarked then that whenever the pulse did not diminish in frequency after delivery, they might certainly look out for hæmorrhage. During the second stage the pulse is quickened during a pain, and then subsides; as the stage went on it subsided less, and went on quickening until the end. When the labor is over the pulse, which during the last bad pain might be 140, fell down to about its natural standard. Then, when reaction took place, it might rise again, to fall afterwards to its natural standard; but when it remained at 120, then they might anticipate danger. In all Dr. M'Clintock said about ergot he agreed, and he had nothing to add to it. There was, however, another matter, although it did not quite come within the purview of Dr. M'Clintock's paper, which was rather the signs than the treatment of hæmorrhage, but which was not altogether alien to it, and that was when the patient had had hæmorrhage before, he always stood over the patient with the uterus grasped in his hand; and he found that he was able to control the hæmorrhage. He had one patient in whose successive labors he had to stand over her thus for two hours. Now he wanted to say a word in opposition to what the Chairman said as to the precipitate delivery of the afterbirth. Provided the Chairman's observations were confined to forcible abstraction by the cord, he quite agreed with him, but he did not agree that the placenta should not be extruded as soon as possible. For a great many years he had been in the habit, by firm pressure and grasp of the uterus, of making the uterus expel the placenta within five minutes, and he had never yet seen hæmorrhage follow. He had seen far more hæmorrhage follow the birth of the child when the placenta was not interfered with, or where the placenta remained half an hour in the uterus before being taken away. He did not know that in a single instance in which the placenta was extruded in the manner he had stated, any hæmorrhage ensued.—*Dublin Medical Journal*.

DIET OF DIABETES.

The patient must be supplied with a diet consisting of nitrogenous food, such as butcher-meat, fish, eggs, and soups. Fat (which does not contribute in the least to the formation of sugar) may be given in all its forms, such as cream, butter, cheese, and oil. Spinach, lettuce, and cresses may be freely used, but celery and radishes only sparingly; while potatoes, carrots, parsnips, turnips, peas, French beans, cabbage, Brussels sprouts, cauliflower, brocoli, asparagus, seakale, and fruit of all kinds, both fresh and preserved, should be avoided, with the exception of nuts and almonds. Instead of bread, the patient should take either the gluten-bread supplied by Ronthorn, 106, Regent Street and Van Abbot, 5, Princes Street, Cavendish Square, or the bran- or almond-biscuit prepared by Blatchley, 362, Oxford Street. Dr. W. Richardson strongly recommends that the

change from an ordinary to a restricted diet should be made very gradually, lest the patient become disgusted with his food. Rather than produce this injurious effect, it is better to relax the diet and permit him to eat sparingly of bread made of whole meal, or even of white bread toasted and potatoes. In the cases of diabetes which depends on imperfect glycogenesis, the restricted diet will be sufficient to prevent the appearance of sugar in the urine. Should it still continue notwithstanding the adoption of this regimen, the circulation in the liver must be reduced as much as possible. For this purpose, the blood-pressure should be reduced, and the blood should be drawn to the surface of the body by warm clothing and warm baths.—*Brunton: Brit. Med. Journ.* Feb. 21, '74.

THE THERAPEUTICAL VALUE OF THE SULPHIDES.

An excellent article is contributed to the *Lancet*, February 21st, by Professor Sydney Ringer, on the sulphides of potassium, sodium and calcium. He says:—

I wish to call attention to the value of sulphides present in many natural waters, in abscesses, boils, and scrofulous sores. The influence of the group on the suppurative process is easily made manifest. Thus when sulphide of potassium or calcium is administered, a thin, watery, unhealthy discharge becomes at first more abundant, afterwards diminishing, and throughout continues thicker and healthier, possessing indeed the characters of "laudable" pus. The condition of the sore improves correspondingly, and its healing is promoted.

Their efficacy may be frequently demonstrated in cases of the following kind. An unhealthy child, from six to twelve months old, suffers from a slight sore-throat, perhaps occurring in scarlet fever or measles. The soar throat produces considerable enlargement of the glands behind the angle of the jaw. The swelling, of stony-hardness, may be sufficiently large to interfere with swallowing and to push the head on one side. Suppuration takes place, but is very deep-seated, and for a long time there is neither redness of the skin nor fluctuation, and the pus very slowly makes its way to the surface, so that a fortnight, three weeks, or even a month may elapse before the abscess bursts or is fit to be opened, when a deep hole is left, with considerable induration around it. The pain and constitutional disturbance are so great that the child sometimes dies; and even if this termination is averted, the deep discharging hole heals very slowly, owing to the indurated and unhealthy state of the adjacent tissues. If a tenth of a grain of sulphide of calcium mixed with a grain of sugar of milk, is given in such a case every hour or two hours, the results are most striking. The swelling becomes smaller, the pus reaches the surface in four or five days, and when it is evacuated leaves a benign wound which quickly heals. The effects of these remedies are equally conspicuous in mammary abscesses, although in rare instances they appear temporarily to increase the pain, a remark which seems sometimes to hold good

with respect to boils. But as a rule the pain is speedily mitigated. Singular to say, I have found these remedies of much less use in forwarding the maturation and expulsion of pus in indolent buboes, but my experience of their use in buboes has been but small.

In boils and carbuncles these remedies yield excellent results. A tenth of a grain of sulphide of calcium, given every two or three hours, generally prevents the formation of fresh boils, while it lessens the inflammation and reduces the area of the existing boils, and quickly liquefies the core, so that its separation is much more speedy, thus considerably curtailing the course of the boil. Where the skin is not yet broken, and the slow-separating core therefore not yet exposed, the sulphides often convert the boil into an abscess, so that on bursting pus is freely discharged, and the wound at once heals. These remedies meanwhile improve the general health, removing that debility and malaise ordinarily so markedly associated with these eruptions. In some cases, however, as in the deep-seated boils and abscesses of diabetes, they are powerless. In carbuncles the sulphides will generally be found equally serviceable, melting, as it were, the core into healthy pus, and so quickly expelling the dead and otherwise slow-separating tissue. In abscesses and carbuncles it is useful to apply belladonna over the inflamed part to reduce inflammation and allay pain. The skin should be thickly smeared with equal parts of belladonna and glycerine, and over this a poultice applied, renewing the belladonna each time the poultice is changed. Poultices, however, being liable to bring out a fresh crop of boils, one of the following plans should be adopted: Smear belladonna ointment some distance round but not over the boil, and then apply a poultice, the greasy application thus protecting the neighboring tissues. Or, still better, apply a belladonna or opium plaster on leather, with a hole the size of the boil around the swelling, and through the opening smear glycerine and belladonna, covering all with a small poultice. The leather plaster efficiently protects the surrounding skin and adverts the production of fresh boils.

I have thought it worth while to mention these useful plans of protecting the boil; but it is scarcely necessary to observe that whilst investigating the effects of sulphides, I have employed them alone, or at most sometimes using only a poultice. The good effects of sulphides are conspicuous in certain scrofulous sores not uncommonly seen in children.

The sulphides appear to me to exercise a very beneficial influence in suppurating scrofulous glands in the neck. Here again they hasten the elimination of the pus, and subsequently the cheesy scrofulous matter. After the abscesses have burst, and continued slowly discharging a scanty, unhealthy pus, and when the edges of the sores have become much thickened and indurated, these remedies render the discharge more abundant, thick, creamy, and healthy, considerably hasten the evacuation of the scrofulous matter, which prevents the healing of the wound, and at the same time softens the round indurated edges, so that the sore heals much more speedily.

If small doses appear to affect these sores but little, larger doses, as half a grain or a grain, should be given several times a day, or even every two hours. I need hardly say that to compass the results described the treatment must be continued several weeks, for it is vain to expect them to occur in a few days, when the sores have been discharging perhaps for months or even years.

THE HYPODERMIC USE OF CARBOLIC ACID.

The *Berlin Centralzeitung* contains an article by Dr. Hunter on the practical value of the subcutaneous injection of carbolic acid as an antiphlogistic remedy in local inflammatory conditions.

He uses a solution of 2 parts of carbolic acid in 100 parts of water. This is injected by means of a Pravaz's syringe, which holds about 0.9 gramme of the solution, or rather less than 0.02 gramme (three-tenths of a grain) of carbolic acid. The injection of two syringefuls of the solution at the same time has not been found to produce any symptoms of poisoning, nor has any darkening of the color of the urine been observed. Dr. Hunter has not exceeded the quantity of two syringefuls at one injection; and he repeats the operation when necessary, only after an interval of one or two days. No pain or swelling follows; the point where the needle is inserted only becomes a little tender. The injection is attended with so little pain, that it does not produce any even in small, sensitive children.

The antiphlogistic action of the parenchymatous injection of carbolic acid was well marked in nearly all cases; and Dr. Hunter specially mentions some of the diseased conditions in which its effects have been distinctly observed.

In hyperplastic granular synovitis (white swelling) of the knee, the injections are made at the most central part of the joint, so that the needle touches its surfaces. The result is abatement of the pain, falling of the evening temperature, which had been persistently high, and distinct reduction of the swelling. The injections must be repeated at intervals of two or three days, according to the chronicity of the disease.

In subacute glandular swellings having a tendency to suppuration, and in inguinal and femoral buboes, the injection leads to abatement of the pain, redness, and œdema; while the glands become reduced in bulk. It is sometimes necessary to repeat the injections several times before the cure is complete.

In acute phlegmon of the subcutaneous and subfascial connective tissue, the injection is made at the periphery, as it may be calculated that the lymphatics will carry the remedy towards the centre; when the phlegmon is extensive, two injections are made at different points. The result is to produce contraction of the tissue in a few hours, with cessation of the pain. Recovery takes place without suppuration, even if this, though imminent, have not already appeared.

In traumatic erysipelas, Dr. Hunter makes an injection at different points along the edge, so as, for instance, to prevent the erysipelas from spreading

from the forehead to the hairy scalp. He has, however, not yet ventured to treat the entire circumference of the erysipelas with numerous injections, so as to cut it short. Dr. Wilde, of Plau, has also recorded some successful cases of treatment of subcutaneous erysipelas by the injection of sulphocarbonate of soda.

Dr. Hunter attaches great importance to making the injections into the parenchyma, so that the carbolic acid may be carried into the cavities of the largest joints, into the connective tissue surrounding the vessels, and into the interior of the lymphatic glands, and there exert its antiphlogistic influence. He regards the parenchymatous injection of carbolic acid as the most powerful antiphlogistic means which we possess; neither the application of ice, nor withdrawal of blood, nor any other means short of operation, can be compared with it in this respect.

LOTION FOR FETID FEET.

The *Union Medicale* recommends permanganate of potash, fifteen parts, distilled water, 1000 parts. The feet to be washed twice a day with the lotion. They are then to be carefully dried, and powdered either with potato-starch or lycopodium.

NOCTURNAL MUSCULAR CRAMPS.

A writer to the *British Medical Journal* says, that if a person subject to this distressing affection will place blocks of wood, six inches high, under each post at the head of his bed, and have his bed made slanting from the head to the foot, he will not suffer from cramps.

CAUTERIZATION OF THE UTERUS.

Dr. Wm. A. Gillespie, of Louisa Court House, Va., writes to the October (28th) number of the *Boston Medical and Surgical Journal*, as follows: Much has been said about the difficulties and different plans of cauterizing the internal surface of the *cervix uteri* and of the body of the uterus, and of the dangers of injecting any liquid caustic preparation into it. I am, therefore, prepared to give a simple, easy and efficient plan for cauterizing the canal of the cervix, and even the cavity of the body of the uterus. I have practised it repeatedly, in a large number of cases, with the happiest results.

Take an ordinary sponge tent and coat it with beeswax, and then roll it for some time with a knife in powdered nitrate of silver, which will sink into, and adhere to, the wax. Then through a suitable speculum carry the prepared tent through a cervix, and if desirable, to the fundus, and let it remain twenty-four hours. No remedy in my hand has done more good in as short a time, in chronic inflammation, engorgement, enlargement, or ulceration of the *os* and *cervix uteri*, and I have never known any unpleasant results from it.

THE CANADA MEDICAL RECORD

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MONTREAL, APRIL, 1874.

A SMALL-POX HOSPITAL FOR MONTREAL.

Montreal is a very progressive city—it has made gigantic strides within a few years, and it still pushes forward its claims for pre-eminence with a vigor which plainly shows that the present is but the prelude to that magnificent future which is in store for it. But it is also a peculiar city; for, when a person is taken sick within its limits, it must needs be ascertained whether the unfortunate is a Catholic or a Protestant, before the proper means can be arranged for his treatment. At least, we should judge this to be the case, from the fact that among a portion of the population there is a loud denunciation of the proposed erection of a Small-Pox Hospital, to be under civic control, and to be used for the admission of patients, irrespective of creed. Those who thus oppose this measure are desirous that \$30,000 out of \$50,000, set apart by the amended City Charter for a Small-Pox Hospital, should be donated to the very estimable ladies of the Hotel Dieu, who would engage to erect on their grounds a Small-Pox Hospital. The remaining \$20,000 they are willing should be given to the authorities of the Montreal General Hospital—to be used in the erection of another Small-Pox Infirmary. This division of opinion has, we regret to say, manifested itself very strongly among a portion of the City Council, and the unfortunate consequence of this state of things has been, that, for a considerable time, this question has been allowed to remain in abeyance. The result has been the disease, beyond the peradventure of a doubt, has carried off, during the past year, many whose lives might have been saved, had they been placed where they would have received good medical attendance, and, what is very essential, good nursing, and been surrounded by favorable hygienic conditions. Such a state of things, so detrimental to the interest of the city, attracted the attention of our new Mayor, Dr. Bernard, and he sought counsel from the various Medical Faculties of the city. In seeking their advice, he doubtless did so because they were more easily reached, and would

be more likely to come to unanimous conclusions, than could possibly be arrived at by a meeting of the general profession. In doing so, we think he acted wisely, for among those consulted were nearly all the hospital physicians of the city, and none, therefore, more competent to express an opinion upon the subject. In accordance, therefore, with the request of the Mayor, the Faculties of McGill College, the Montreal School of Medicine and Surgery, (Victoria College,) and Bishop's College, met, and discussed the question, and on the 8th of April, by invitation, delegates from these various bodies met the Board of Health. McGill College was represented by its Dean, Dr. Campbell, and Dr. Howard; Victoria College, by Drs. Peltier, Munro and Rottot; and Bishop's College, by its Dean, Dr. David, Dr. Godfrey and Dr. F. W. Campbell. The reports from these various bodies are so important, and may in the future be referred to, we therefore clip from the *Montreal Gazette*, the following:

"The Mayor, in opening the proceedings, stated that the meeting had been called especially to consider the question of the spread of small-pox and the establishment of a small-pox hospital. The dread disease still prevailed extensively in the city, and must be stamped out. The medical gentlemen present would enlighten the Board as to the best means for doing so. He had, as Mayor of the city and Chairman of the Board of Health, called upon the Deans of the different medical faculties, and requested them to obtain an opinion from their faculties on the establishment of a hospital, and the mode of stamping out the disease. The need of doing so had long been felt, and the Board would be glad to have, on this subject, the advice of skilled and learned men. The moot point was, should the hospital be isolated and under civic control, or should the funds voted for its establishment be divided between the Hotel Dieu and the Montreal General Hospital? They would now hear the opinion of the Medical Faculties.

Dr. CAMPBELL, as Dean of the Medical Faculty of McGill, and as the oldest member of the profession in Montreal, spoke for McGill College. Three questions had been submitted to them by His Worship the Mayor.

1st. Should the hospital be isolated?

2nd. Should compulsory removal of small-pox patients to the hospital be insisted on?

3rd. Should vaccination be made compulsory?

He himself and Dr. Howard had been deputed by the Faculty to meet the Board of Health and lay the answers before the members.

The Faculty were unanimously of opinion—

1st. That the proposed small-pox hospital should be thoroughly isolated and under the control and management of the Corporation, which should appoint the medical officers. That it was better to have one hospital than to divide the fund between two small ones under the management of the Hotel Dieu and the Montreal General Hospital.

2nd. That compulsory removal would be highly desirable if practicable, but the Faculty doubt its being so, as many patients would prefer being attended to in their own houses.

3rd. That compulsory vaccination should be enforced.

The Faculty were also of the opinion that the new hospital should contain private wards, to which the better class of patients could be removed, and where they could be attended by their own physicians.

Dr. PELTIER, on behalf of the Medical Faculty Victoria College, stated—

1st. That the Faculty recommended the acceptance of the offer of the Ladies of the Hotel Dieu to erect a small-pox hospital on their own grounds, and favored the idea of its being isolated as far as possible.

2nd. That the Faculty did not deem compulsory removal practicable.

3rd. That compulsory vaccination was absolutely necessary, and that the Board of Health be recommended to obtain pure vaccine matter, at its own expense.

Dr. DAVID, on behalf of the Medical Faculty of Bishop's College, stated that the Faculty had fully discussed the matter, and was unanimous in recommending:—

1st. That an isolated hospital be established, and be under the control of the Corporation.

2nd. That the buildings be temporary, so that they could be destroyed every four or five years.

3rd. That the law of public vaccination be rigorously carried out, and that the School Commissioners be requested to obtain from every pupil, desirous of admission into the public schools, a certificate of vaccination.

Mr. PERRAULT wished to ask Dr. Peltier whether, in case the Ladies of the Hotel Dieu obtained permission to build the hospital, they would allow the Corporation to have the control of it?

Drs. PELTIER and MUNRO could not answer that question.

Mr. PERRAULT could. They would not.

Dr. CAMPBELL was decidedly of opinion that such a plan would never work. The Faculty of

McGill was unanimously in favor of an isolated hospital under civic control, and was decidedly of opinion that there should be one large and not two small buildings.

Dr. F. W. CAMPBELL thought it a pity that \$20,000 should be wasted on one building and \$30,000 on another, instead of the whole sum of \$50,000 being concentrated on one. He alluded to the necessity of having private wards, and referred to a house-to-house visitation he had made a few years ago, stating that of nearly 2,000 persons of French nationality examined by him in St. Lawrence Ward alone, ninety per cent. could scarcely show a good vaccine mark, a fact which proved the necessity for compulsory re-vaccination.

Dr. CAMPBELL had practised in Montreal for 41 years, and had always had a large practice. He had never had one fatal case of small-pox among patients whom he had vaccinated himself, having always taken care to use pure matter.

The medical delegates having to leave,

Alderman ALEXANDER moved—

That the thanks of the Board of Health are hereby tendered to the Deans and members of the Faculties of McGill College, Victoria College and Bishop's College, and that the Board trusts that it will always have the hearty co-operation of the medical schools of this city in the stamping out of the terrible scourge—small-pox."

The vote of thanks was unanimously carried.

Dr. CAMPBELL, in acknowledging, said that the Medical Faculties would be always be glad to assist the Board of Health in any way.

It will be seen at once that two English Schools—McGill and Bishop's College—had unanimously arrived at the same conclusions, viz.: that it was advisable to have but one hospital, open alike to all, to be under civic control. On the other hand Victoria College recommended that the Corporation give \$30,000 to the Hotel Dieu, who would erect on their grounds a Small-Pox Hospital, and they recommend further that, *as far as possible*, it should be isolated. In order that the value of the advice thus tendered may be received at its true worth, we have to inform our readers that the Victoria Faculty have entire control of the Hotel Dieu Hospital, the arrangement, we have reason to believe, being by notarial contract,—so that, in truth, they were really soliciting aid to build a Small-Pox Hospital, which would be under their control,—nearly, if not quite as much as it would be under the control of the Ladies of the Hotel Dieu. Why they should have added the words—that it should be *isolated as far*

as possible, we were, at first, at a loss to imagine. It was not that advice which we think was to have been expected from a body of scientific gentlemen, who should certainly have expressed the opinion that isolation was an absolute necessity. Within a few days, however, we have we think been furnished with information which explains the very singular addition to their report; and it is this. If the money is given to the Hotel Dieu, to erect a Small-Pox Hospital, we are assured by one who should know, that it will be connected with the main building by means of a covered way. If this should be done, we need hardly say, the expenditure of money will have been perfectly useless, and without the comforting reflection that the expenditure was made in ignorance. Is not the unfortunate experience of the Montreal General Hospital, to our hand, to show that notwithstanding that admirable Institution, has as far as it is possible, made the separate building, (about three feet from its main building,) used for small-pox patients, an isolated hospital, yet the disease has spread to those who were admitted with other affections. It is, therefore, to us a matter of very sincere regret that the Montreal School of Medicine did not see their way clear to come to conclusions similar to those arrived at by McGill and Bishop's Colleges, which we honestly believe, are simply scientific deductions drawn, after viewing the matter in a purely scientific light. We can but believe that, had our friends of the School of Medicine, reasoned the questions put them by the Mayor, from a purely scientific stand-point, there would not have been any difference between the report presented by them and that presented by their English confrères. Unfortunately, we feel constrained to believe that they have not done so, and the result has been that their report, which will strongly influence the action of many members of the council, is one which will not, in our opinion, bear investigation. It is not clear and plain, its advice is not distinct and emphatic, unless indeed it be in advising that the \$30,000 be given to the Hotel Dieu. Their first scientific advice, that with regard to isolation, is not, in accordance with the views held by all eminent authorities of the present day on the subject. Did space permit us, there is another part of this report, which we would like to notice, viz: Their advice with regard to vaccination; but, although we listened very attentively to the report, and to the subsequent remarks of their representative, (which seemed to us not to accord precisely with the report) we confess that we left the City Hall, not knowing exactly what their recommendation on this point was, although we

thought they were in favor of compelling primary vaccination but not of compulsory re-vaccination. If so, we think that here again their advice is not that which is now generally received by the medical world.

We will not follow this matter further, for it is not a pleasant one to handle; but we feel that the meeting of the Representatives of the three Medical Faculties, with the Board of Health was a fit and proper matter for discussion in the *Record*. We wish most earnestly that it were in our power to make those who hold the decision of this matter in their hand see the matter as we do. We earnestly ask them to pause before they ultimately commit this City of Montreal, to a blunder, which would make us the scorn of the scientific world. The great glory of medicine is the universality with which its benefits are bestowed, showered alike on all. Shall we in this enterprising city be the first to lay down the maxim that Protestant and Catholic, Jew and Pagan cannot occupy the same building when stricken down with disease. God forbid, that a doctrine so monstrous, should first see light in Montreal.

BISHOP'S COLLEGE MEDICAL FACULTY.

The third annual Convocation for the conferring of degrees in the Faculty of Medicine of Bishop's College, was held in the Convocation Hall of the University, at Lennoxville, on the 9th April. The Chancellor, Hon. Edward Hale, presided, having on the platform the President of the Corporation, his Lordship the Anglican Bishop of Quebec. There was a large attendance of the friends of the University.

Dr. David, Dean of the Faculty, announced that thirty students had matriculated on the College Register—twenty-six from the Province of Quebec; three from Ontario, and one from Barbadoes. That the Faculty prize for the best final examination had been awarded to Mr. Robert Costigan, a gentleman who had commenced and finished his medical education at the College.

The following gentlemen passed their examinations on botany:—Messrs. Gravely, Lane, Shee and Davis.

The following gentlemen passed their primary examination, viz., John M. Mackay, David A. Hart, P. Arthur Shee, Israel Lemieux, Edward Rose, Joseph Arthur Pidgeon, Victor J. A. Venner.

The Dean then presented the following gentlemen for graduation, when the usual oath having been

administered to them, the Venerable Chancellor conferred upon them the degree of C.M., M.D.; viz., W M Hunter, Cornwall, Ont.; Valmore St. Germain, St. Hyacinthe, Que.; David A. Hart, St. Zephirin, Que.; Israel Lemieux, St. Urbain, Que.; Esrom A. Duclos, Montreal; Jeremiah Eneas, Montreal; John M. Mackay, St. Eustache; P. Arthur Shee, Quebec; Victor John A. Venner, Quebec; Robert Costigan, Montreal; Charles Lafontaine, Chambly; Edward Rose, St. Philomène.

Professor Leprohon then addressed the graduates upon behalf of the Faculty, and Dr. David A. Hart delivered the valedictory on the part of the graduates, after which the Convocation adjourned.

ANNUAL CONVOCATION OF MCGILL UNIVERSITY.

The annual convocation of McGill University for the conferring of degrees in the Faculty of Medicine was held in the "William Molson Hall" of the University, the 30th March, 1874.

The Students, Graduates, and many friends of the University began to arrive long before the commencement of the ceremonies, the Hall being well filled with ladies, many of whom were relatives of those who were about to graduate in Law and Medicine. About three o'clock the members of Convocation, who had assembled in the Library, marched in order of precedence to the Convocation Hall, headed by the Hon. Mr. Justice Dunkin.

The opening prayer was read by Rev. Prof. Cornish, LL.D.

The dean of the Medical Faculty, George W. Campbell, A.M., M.D., submitted the following report of the Medical Faculty for the session just closed.

The total number of students attending the Lectures of this Faculty during the past season was 130, of whom there were from Ontario, 71; Quebec, 50; Nova Scotia, 3; United States, 2; Newfoundland, 1; West Indies, 1; New Brunswick, 2.

Thirty-three gentlemen have passed their primary examinations.

The following gentlemen, 31 in number, have passed their final examination in medicine: Cameron James C., Montreal; Cline John D., B. A., Cornwall, Ont; Harvey William A., Newbridge, Ont; Henderson Edward G., Belleville, O; Hickey Samuel A. B., Aultsville, O; Hockridge Thos G., Bradford, O; Jones Charles R., Hastings, O; Jones George Nelson, St. Andrews, Q; Macdonald Roderick A., Cornwall, O; McBain John, Williamstown, O; McCormick Andrew G., Durham, Q; McDonell

Alex. R., Loch Garry, O; McMillan Abneac J., Edwardsburg, O; McQuillan James, Marquette, Mich, U S; Mines William W., Montreal, Q; Molson William A., Montreal, Q; Moore Charles S., London, O; Moore Jehiel T., Holbroke, O; Norton Thomas, Montreal, Q; Pattee Richard P., Hawkesbury, O; Pacian James, Stratford, O; Prosser William O., Lunenburg, O; Rattray James C., Portage du Fort, Q; Reddick Robert, Prescott, O; Ritchie John L., Halifax, N S; Rogers Amos, Bradford, O; Sinclair Coll, St. Thomas, Q; Speer Andrew M., Richmond, Q; Sutherland Walter, Helena, Q; Wales Benjamin N., St. Andrews, Q; Wallace Isaac W., Milton, Q.

The Holmes medal was awarded to John D. Cline, B A, Cornwall, Ont. The prize for the final examination was awarded to James C. Cameron, Montreal.

The prize for the primary examination was awarded to Simon J Tunstall, B A, Montreal.

The following gentlemen, arranged in the order of merit, deserve honourable mention:—

In the final examination, Messrs. Sinclair, Molson, Mines, Ritchie, Sutherland.

In the primary examination, Messrs. Benson, Hanington, Burland, Bain, Scott, Brossard and Langlois.

PROFESSOR'S PRIZES.—*Botany*—First prize, W. Washburn; second prize, C. L. Cotton; prize for collection of plants, C. McL. Lang. *Practical Chemistry*—Prize, C. S. Sinclair. *Practical Anatomy*—Senior prize, Smith; junior prize, Campbell and Murray.

The graduates in medicine were then brought forward, and the "Sponsio Academica" having been administered by the Registrar, Professor Craik, M. D., the ceremony of capping was performed by Principal Dawson.

The valedictory address, on the part of graduates, was then delivered by Dr. Mines, after which Professor Ross, addressed the graduates on behalf of the Medical Faculty.

QUEBEC COLLEGE OF PHARMACY.

The usual monthly meeting of this Institution was held on Thursday evening, the 9th April, Mr. H. R. Gray, president, in the chair, and Mr. Harper, in the absence of Mr. Mattinson, acting as Secretary. A donation of two bound volumes of the "Chemist and Druggist" was announced. Dr. A. H. Kollmyer, professor of Materia Medica of

Bishop's College and lecturer on *Materia Medica*, chemistry and Botany at the Quebec College of pharmacy, then delivered a very interesting lecture on "Electrolysis." The lecturer, before entering upon his subject, gave a short history of electricity itself. He said that the term electricity is derived from a Greek word *Elektron*, signifying amber, because it was first noticed by the Ancients in that substance, and that we are told that Thales of Miletus spoke of this property in amber six hundred years before the Christian era; but that no further progress was made concerning it till the beginning of the last century, when new and important facts were discovered, and that these attracted general attention among philosophers, and speedily acquired for it the regular form of a science—a science, indeed, which has since been, applied to so many useful and ornamental purposes and also one which has served in a manner almost to annihilate time and distance, as exemplified in the telegraph.

He then entered upon the discussion of the true nature of electricity, which he defined to be one of the forms of *force*, and he demonstrated by experiments and diagrams how electricity could be converted into heat, light, and the other forms of force, and how it could not only produce motion, but how motion could also produce electricity. He afterwards entered into a description of the three forms of electricity:—1st, that excited by friction; 2nd, magnetism, and 3rdly, galvanism. He explained the theory of thunderstorms, and described the effects of lightening and of galvanism on both living and dead animals. He described fully the component parts of the various galvanic and voltaic batteries or piles, as well as the construction of magnets, and by many numerous brilliant and instructive experiments he was enabled to decompose water and to effect other chemical changes and decompositions in bodies. He then spoke of the numerous discoveries of metals by Sir Humphry Davy, by the aid of this means of decomposition; that this philosopher had proved that potash, soda, lime, &c., were not the simple bodies that they had up to that time been regarded, but that they were in reality compounds of potassium, sodium, calcium &c., with oxygen gas, whose disunion he effected by "Electrolysis." Through its instrumentality chemists have been enabled to become acquainted with the true nature of many other elementary bodies and new fields have been opened up for investigation, and he felt certain that new and important discoveries will yet be made. The study of elec-

tricity in its different forms, he remarked, had charms and attractions about it scarcely possessed by any other branch in science, and most undoubtedly unsurpassed by any in the brilliancy, variety, grandeur, as well as in the usefulness of the results. The experiments throughout were of the highest order, most interesting and instructive, and the lecturer concluded by thanking Dr. Shaw and Mr. Anthony Kerry for their assistance in enabling him to demonstrate the various points under consideration.

A vote of thanks, proposed by Mr. Mercer and seconded by Mr. Saunders, was given to the lecturer and the meeting then adjourned.

This concludes the monthly meetings of this session. It was a subject of remark that the unnecessarily late closing of the drug stores kept many young men from availing themselves of these lectures.

MEMOIR OF PROFESSOR JAMES SYME.

Our readers will be glad to learn that a volume with the above title has just appeared from the pen of Dr. Robert Paterson, of Leith. The author gives an interesting account of the education, early professional life, and ultimate success of the great Scotch surgeon, and supplies many details of the most notorious circumstances connected with his career, including the polemics in which he so actively engaged. The book ought to be widely read by the profession.

PERSONAL.

Dr. Thomas R. Dupuis has been appointed to the Chair of Anatomy, in the Royal College of Physicians and Surgeons, Kingston, Ont.

Dr. J. Baker Edwards has resigned the Chair of Chemistry in Bishop's College Medical School. He remains in the Faculty, as Professor of Practical Chemistry and Microscopy.

Dr. George Begg Shaw, appointed last year Lecturer on Chemistry in Bishop's College Medical School has been appointed Professor of Chemistry in place of Dr. J. Baker Edwards resigned.

Dr. Thomas G. Roddick has resigned the House Surgeoncy of the Montreal General Hospital. He commences practice in Montreal, and has the heartiest good wishes of his many friends.

Dr. Clarence J. H. Chipman has been appointed House Surgeon to the Montreal General Hospital.

Dr. P. Arthur Shee, (Bishop's College, 1874), has commenced practice in Quebec.

Dr. Lemieux, (Bishop's College, 1874), has settled in St. Urbain, Chateauguay County.

REVIEWS.

A Practical Treatise on the Diseases of Children.

By J. FORSYTH MEIGS, M.D., one of the Physicians to the Pennsylvania Hospital and William Pepper, M.D., Lecturer on Clinical Medicine in the University of Pennsylvania; fifth edition revised and enlarged; Philadelphia, Lindsay & Blackiston, 1874; Montreal, Dawson, Brothers.

Works upon diseases of childhood have to us always a peculiar interest. The longer we are in the profession, the more firmly do we become convinced that in this class of diseases, more than in any other, we find ourselves often at sea, with but little to guide us. The peculiar attention which within the last ten years, has been given to children's diseases, is doing much to make their diagnosis plain. To the two gentlemen, who have written this book, the profession owe much, for they have labored well and zealously in this peculiar field. The volume of almost one thousand pages, now before us, is the result of their united efforts, and it stands pre-eminent, as a scientific treatise, among the many admirable works of this kind, which have appeared during the past ten years. One would have imagined that as the third edition appeared in 1870, there would be but little to do, to bring out the fifth edition. So rapid does medicine progress, that such seems not to be the case, for we notice that the articles on diseases of the heart; on progressive muscular sclerosis; on the treatment of scarlet fever, and of measles; on variola and the vaccine disease have been entirely rewritten, others entirely new, having been previously omitted, are now supplied. Among these we may mention; Pulmonary emphysema, pneumothorax, affections of the tonsils, retro-pharyngeal abscess, malaria fevers, and scrofula. As a work of constant reference, we have used Meigs & Pepper, for several years, and when we desired to seek for information and advice, we have rarely found it fail us. In making this statement, we think we say much in its favor, for we have several works on diseases of childhood in our library, which are very often useless, because they are destitute of any information upon many diseases common to infantile life. We therefore honestly recommend this volume, either to those who may

desire to add to the books, which they already have on this subject, or to them who being unable to get many, desire a really good one. They may take our word for it, they will never regret its purchase.

Clinical uses of Electricity. By J. RUSSELL REYNOLDS, London, Eng.; Lindsay & Blackiston. 2nd Edition, Philadelphia; Dawson Bros., Montreal, 1874.

Galvano—Therapeutics. A Report made to the Illinois State Medical Society, 1873. Lindsay & Blackiston, Philadelphia; Dawson Bros., Montreal.

This little work is thoroughly practical, and for those just beginning the study of electrical treatment, we would strongly advise them to read this work first, and afterwards take either Beard & Rockwell's Medical and Surgical Electricity, or the larger work by Althaus. The author gives a good simple description of each form of electricity, and very properly clears up a great deal of the confusion existing from the use of too many synonymous terms. The chapter on the therapeutical uses of electricity contains valuable matter, and nearly altogether gives the author's own views. They who are somewhat advanced in the knowledge of the subject would do well to read it attentively. We see our author is not opposed to the application of electricity to the head, and affirms it to be of much benefit when properly applied. Such is our experience. Prof. Cyon, of St. Petersburg is opposed to it, but his objections are purely theoretical; and practical experience, the crucial test of all theories, shews him to be wrong. It is only another instance of how eminent men will differ upon points where one would think all should agree. To those who are desirous of looking into the subject of medical electricity, we would strongly advise them to begin with this work of Russell Reynolds.

At the same time we received the above, a revised report of Galvano-Therapeutics, made to the Illinois State Medical Society, came to hand. It contains a good deal of interesting matter, but advances nothing new—at least, nothing that is new on this side of the Atlantic. The Americans, although by no means the originators in the application of electricity to medical and surgical purposes, are now, at all events, ahead of Europeans in its more general uses.

The Physician's Dose and Symptom Book containing the doses and uses of all the principal articles of the Materia Medica, &c. By JOSEPH H. Wythes, A.M., M.D., eleventh edition; Philadelphia, Lindsay & Blackston, 1874; Montreal, Dawson Bros.

This little volume is, in its way, a gem, containing an immense amount of information, in a manner so terse and yet so comprehensive, that it will be found of great value to all who are busily engaged in practice. The fact that it has gone through ten editions is a good guarantee that the profession has not failed to appreciate its merits.

RIP VAN WINKLE, M. D.

By Dr. Oliver Wendell Holmes, Boston, Massachusetts.

AN AFTER DINNER PRESCRIPTION TAKEN BY THE MASSACHUSETTS MEDICAL SOCIETY, AT ONE OF THEIR RECENT MEETINGS.

CANTO FIRST.

Old Rip Van Winkle had a grandson, Rip,
Of the paternal block a genuine chip;
A lazy, sleepy, curious kind of chap;
He, like his grandsire, took a mighty nap,
Whereof the story I propose to tell
In two briefs cantos, if you listen well.

The times were hard when Rip to manhood grew;
They always will be when there's work to do;
He tried at farming—found it rather slow—
And then at teaching—what he didn't know;
Then took to hanging 'round the tavern bars;
To frequent toddies and long-nine cigars,
Till Dame Van Winkle, out of patience, vexed
With preaching homilies, having for their text
A mop, a broomstick—ought that might avail
To point a moral or adorn a tale,
Exclaimed—"I have it! Now then, Mr. V.!
He's good for *something*—make him an M. D.!"

The die was cast; the youngster was content;
They packed his shirts and stockings, and he went.
How hard he studied it were vain to tell—
He drowsed through Wistar, nodded over Bell,
Slept sound with Cooper, snored aloud with Good;
Heard heaps of lectures—doubtless understood—
A constant listener, for he did not fail
To carve his name on every bench and rail.

Months grew to years; at last he counted three,
And Rip Van Winkle found himself M. D.
Illustrious title! in a gilded frame
He set the sheepskin with his Latin name,
Ripum Van Winklum, quem we—scimus—kuow
Idoneum esse—to do so and so;
He hired an office; soon its walls displayed
His new diploma and his stock in trade,
A mighty arsenal to subdue disease

Of various names, whereof I mention these:
Lancets and bougies, great and little squirt,
Rhubarb and Senna, Snakeroot, Thoroughwort,
Ant. Tart, Vin. Colch. Pil Cochiae and Black Drop,
Tinctures of Opium, Gentian, Henbane, Hop,
Pulv. Ipecacuanhæ, which for lack
Of breath to utter men call Ipecac,
Camphor and Kino. Turpentine, Tolu,
Cubebs, "Copeevy," Vitriol—white and blue,
Fennel and Flaxseed, Slippery Elm and Squill,
And roots of Sassafras and "Sassaf'ril,"
Brandy—for colics—Pinkroot, death on worms—
Valerian, calmer of hysteric squirms,
Musk, Assafoetida, the resinous gum
Named from its odor—well, it does smell some—
Jalap, that works not wisely but too well,
Ten pounds of bark and six of Calomel.

For outward griefs he had an ample store,
Some twenty jars and galipots, or more:
Ceratum simplex—housewives oft compile
The same at home, and call it "wax and ile;"
Unguentum Resinosum—change its name,
The "drawing salve" of many an ancient dame;
Argenti Nitras, also Spanish flies,
Whose virtue makes the water-bladders rise—
(Some say that spread upon a toper's skin
They draw no water, only rum or gin)—
Leeches, sweet vermin! don't they charm the sick?
And sticking-plaster—how it hates to stick!
Emplastrum Ferri—ditto *Picis*, Pitch;
Washes and Powders, Brimstone for the—which,
Scabies or *Psora*, is thy chosen name
Since Hahnemann's goosequill scratch'd thee into fame.
Proved thee the source of every nameless ill,
Whose sole specific is a moonshine pill,
Till saucy science, with a quiet grin,
Held up the *Acarus*, crawling on a pin?
Mountains have labored and have brought forth mice:
The Dutchman's theory hatched a brood of—twice
I've well nigh said them—words unfitting quite
For these fair precincts and for ears polite.

The surest foot may chance at last to slip,
And so at length it proved with Dr. Rip.
One full-sized bottle stood upon the shelf
Which held the medicine that he took himself;
Whate'er the reason, it must be confessed
He filled that bottle oftener than the rest:
What drug it held I don't presume to know—
The gilded label said "Elixir Pro."

One day the Doctor found the bottle full,
And, being thirsty, took a vigorous pull,
Put back the "Elixir" where 'twas always found,
And had old Dobbin saddled and brought 'round,
—You know those old-time rhubarb-colored nags
That carried Doctors and their saddle-bags;
Gracious beasts! they stopped at every place
Where blinds were shut—knew every patient's case—
Looked up and thought—the baby's in a fit—
That won't last long—he'll soon be through with it;
But shook their heads before the knocked door
Where some old lady told the story o'er

Whose endless stream of tribulation flows
For gastric griefs and peristaltic woes.

What jack o' lantern led him from his way,
And where it led him, it were hard to say ;
Enough, that wandering many a weary mile
Through paths the mountain sheep trod single file,
O'ercome by feelings such as patients know
Who dose too freely with "Elixir Pro."
He tumbled—dismounted, slightly in a heap.
And lay, promiscuous, lapped in balmy sleep.

Night followed night, and day succeeded day,
But snoring still the slumbering Doctor lay.
Poor Dobbin, starving, thought upon his stall,
And straggled homeward, saddle-bags and all ;
The village people hunted all around,
But Rip was missing—never could be found.
"Drowned" they guessed—for more than half a year
The pouts and eels *did* taste uncommon queer ;
Some said of apple-brandy—other some
Found a strong flavor of New-England rum.

Why can't a fellow hear the fine things said
About a fellow when a fellow's dead ?
The best of doctors—so the press declared—
A public blessing while his life was spared,
True to his country, bounteous to the poor,
In all things temperate, sober, just and pure ;
The best of husbands ! echoed Mrs. Van,
And set her cap to catch another man.

So ends this Canto—if it's *quantum suff.*,
We'll just stop here and say we've had enough,
And leave poor Rip to sleep for thirty years ;
I grind the organ—if you lend your ears
To hear my second Canto, after that
We'll send around the monkey with hat.

CANTO SECOND.

So thirty years had past—but not a word
In all that time of Rip was ever heard ;
The world wagged on—it never does go back—
The widow Van was now the widow Mac—
France was an Empire—Andrew J. was dead,
And Abraham L. was reigning in his stead.
Four murderous years had passed in savage strife,
Yet still the rebel held his bloody knife.
At last one morning—who forgets the day
When the black cloud of war dissolved away ?—
The joyous tidings spread o'er land and sea.
Rebellion done for ! Grant has captured Lee !
Up every flagstaff sprang the Stars and Stripes—
Out rushed the Extras wild with mammoth types—
Down went the laborer's hod, the schoolboy's book—
"Hooraw !" he cried, "the rebel army's took !"
Ah ! what a time ! the folks all mad with joy
Each fond, pale mother thinking of her boy ;
Old gray-haired fathers meeting—Have—you—
heard ?

And then a choke—and not another word ;
Sisters all smiling—maidens, not less dear,
In trembling poise between a smile and tear ;
Poor Bridget, thinking how she'll stuff the plums
In that big cake for Johnny, when he comes ;

Cripples afoot—Rheumatics on the jump,
Guns going bang ! from every fort and ship—
They banged so loud at last they wakened Rip.

I spare the picture, how a man appears
Who's been asleep a score or two of years ;
You all have seen it to perfection done
By Joe Van Wink—I mean Rip Jefferson.
Well, so it was—old Rip at last come back,
Claimed his old wife—the present widow Mac—
Had his old sign regilded and began
To practice physick on the same old plan.

Some weeks went by—it was not long to wait—
And "Please to call" grew frequent on the slate.
He had, in fact, an ancient, mildewed air,
A long grey beard, a plenteous lack of hair—
The musty look that always recommends
Your good old doctor to his ailing friends.
—Talk of your science ! after all is said
There's nothing like a bare and shiny head.
Age lends the graces that are sure to please,
Folks want their doctors mouldy, like their cheese.

So Rip began to look at people's tongues
And thump their breasts (called it "sound their
lungs,")
Brushed up his knowledge smartly as he could,
Read in an old Cullen and in Doctor Good.
The town was healthy ; for a month or two
He gave the sexton little work to do.

About the time when dogday heats begin,
Measles and mumps and mulligrubs set in ;
With autumn evenings dysentery came.
And dusky typhoid lit his smouldering flame ;
The blacksmith ailed—the carpenter was down,
And half the children sickened in the town.
The sexton's face grew shorter then before—
The sexton's wife a bran new bonnet wore.
Things looked quite serious—Death had got a grip
On old and young, in spite of Dr. Rip.

And now the Squire was taken with a chill—
Wife gave "hot drops"—at night an Indian pill ;
Next morning, feverish—bedtime, getting worse,
Out of his head—began to rave and curse ;
The Doctor sent for—double quick he came ;
Ant turt. gran. duo, and repeat the same
If no etcetera. Third day—nothing new ;
Percussed his thorax—set him cussing, too—
Long fever threatening—something of the sort—
Out with the Lancet—let him bleed—a quart—
Ten leeches next day—then blister to his side ;
Ten grains of calomel—just then he died.

The deacon next required the doctor's care—
Took cold by sitting in a draught of air—
Pains in the back, but what the matter is
Not quite so clear—wife calls it "rheumatiz."
Rubs back with flannel—gives him something hot—
"Ah !" says the deacon, "that goes *nigh* the spot."
Next day a *rigor*—run, my little man,
And say the Deacon sends for Doctor Van.

The Doctor came—percussion as before,
Thumping and banging till his ribs were sore—
“Right side the flattest”—then more vigorous raps—
Fever—that’s certain—pleurisy, perhaps.
A quart of blood will ease the pain, no doubt,
Ten leeches next will help to suck it out,
Then elap a blister on the painful part—
But first two grains of *antimonium tart.*
Last, with a dose of cleansing calomel
Unload the portal system—that sounds well!

But when the self-same remedies were tried,
As all the village knew, the squire had died;
The neighbors hinted—“this will never do,
He’s killed the squire—he’ll kill the deacon, too.”

Now, when a doctor’s patients are perplexed,
A *consultation* comes in order next—
You know what that is? In a certain place
Meet certain doctors to discuss a case
And other matters, such as weather, crops,
Potatoes, pumpkins, lager beer and hops.
For what’s the use—there’s little to be said,
Nine times in ten your man’s as good as dead—
At best a talk (the secret to disclose)
Where three men guess and *sometimes* one man knows.

The counsel summoned came without delay—
Young Doctor Green and shrewd old Dr. Gray—
They heard the story “Bleed!” says Doctor Green,
“That’s downright murder! cut his throat, you mean;
Leeches! the reptiles! Why, for pity’s sake,
Not try an adder on a rattlesnake?
Blisters! Why bless you they’re against the law—
It’s rank assault and battery if they draw!
Tartrate of Antimony! shade of Luke!
Stomachs turn pale at thought of such rebuke!
The portal system! What’s the man about?
Unload your nonsense! Calomel’s played out!
You’ve been asleep—you’d better sleep away
Till some one calls you”—

“Stop!” says Doctor Gray—
“The story is you slept for thirty years;
With brother Green, I own that it appears
You must have slumbered most amazing sound;
But sleep once more till thirty years come round,
You’ll find the lancet in its honored place,
Leeches and blisters rescued from disgrace,
Your drugs redeemed from fashion’s passing scorn,
And counted safe to give to babes unborn.”

Poor sleepy Rip, M. M. S. S., M. D.,
A puzzled, serious, saddened man was he;
Home from the deacon’s house he plodded slow
And filled one bumper of “Elixir Pro.”
“Good bye,” he faltered, “Mrs. Van, my dear;
I’m going to sleep, but wake me once a year.
I don’t like bleaching in the frost and dew,
I’ll take the barn, if all the same to you.
Just once a year—remember! no mistake!
Cry ‘Rip Van Winkle! time for you to wake!’
Watch for the week in May when laylocks blow,
For then the doctors meet, and I must go.”

Just once a year the doctor’s worthy dame
Goes to the barn and shouts her husband’s name,
“Come, Rip Van Winkle!” (giving him a shake)
“Rip Van Winkle! time for you to wake!
Laylocks in blossom! ’tis the month of May—
The doctors’ meeting is this blessed day,
And come what will, you know I heard you swear
You’d never miss it, but be always there!”
And so it is, as every year comes round
Old Rip Van Winkle here is always found.
You’ll quickly know him by his mildewed air,
The hayseed sprinkled through his scanty hair,
The litchens growing on his rusty suit—
I’ve seen a toadstool sprouting on his boot—
Who says I lie? Does any man presume—
Toadstool? No matter—call it a mushroom,
Where is his seat? He moves it every year;
But look, you’ll find him—he is always here—
Perhaps you’ll track him by a whiff you know—
A certain flavor of “Elixir Pro.”

Now, then, I give you—as you seem to think
We can drink healths without a drop to drink—
Health to the mighty sleeper—long live he!
Our brother Rip, M. M. S. S., M. D.!

—*Boston Medical and Surgical Journal.*

TO CORRESPONDENTS.

Letters have been received from Dr. Cunningham, Indianapolis, Indiana, U.S.; Dr. Thayer, Montreal; Dr. Wickham, Halifax; Dr. Mackay, Lachine; Dr. Lawrence, Marbleton; Dr. Ferguson, Galt; Dr. W. Henderson, Arthur; Dr. Glen, Chambly; Dr. Ogden, Toronto; Dr. Smallwood, Montreal; Dr. Tetu, River Ouelle; Dr. Bowlby, Waterford, O.; Dr. Oldright, Toronto; Dr. Ouellet, Acton Vale; Dr. Fraser, New Glasgow, N.S.; Dr. Kenneth Reid, New York; Dr. Jackson, Quebec; Dr. King, St. Sylvester; Dr. Baddeaux, Three Rivers; Dr. Gilbert, Sherbrooke; Dr. Laramie, Montreal; Dr. Bull, Worcester, Mass.; J. P. Lippincott & Co., Philadelphia; Dr. Henderson, Ottawa; Dr. Fitzpatrick, Baie St. Paul; Dr. Lemieux, St. Urbain; Dr. Bigham, Fenelon Falls, Ont.

BIRTHS.

On Saturday, 28th instant, the wife of Dr. D. C. McCalm, of a daughter.

At Ottawa, on the 6th instant, the wife of Thomas B. Bentley, Esq., M.D., of twin-daughters, still-born.

MARRIED.

In Montreal, on the 8th of April, at Christ Church Cathedral, by the Rev. Canon Baldwin, William Henry Hornett, M.D., to Georgina, third daughter of Harvey Perkins, Esq.

In Montreal, on the 10th April, at St. Stephen’s Church, by the Rev. Lewis Evans, John T. Finnie, M.D., to Amelia, second daughter of C. Healy, Esq.

DIED.

In Montreal, on the 22d April, John Campbell, advocate, aged 47 years and 10 months, brother of Dr. Francis W. Campbell.

Original Communications.

True Membranous Croup.—Tracheotomy—Fatal issue. By RICHARD A. KENNEDY, A.M. M.D.
Professor of Anatomy, University of Bishop's College. (Read before the Medico-Chirurgical Society of Montreal, May 22, 1874.)

The following case is reported chiefly from memory, as but few notes were kept. I had not expected that I should read the case, and therefore took no pains to have a full report. I was sent for during the night of the 25th of February last, to see a child, aged four years, suffering from croup.

The previous history showed that the boy had been subject for some days to a cough, which, however, had not been croupy. This night he was suddenly awakened by the cough of croup, which was so prolonged, and of so alarming a nature, that the parents sent immediately for me. On my arrival, the spasm had left him, and the child was quiet, but the breathing was somewhat dry and wheezing. My diagnosis was catarrhal croup.

An emetic of ipecac. and antimony was given, which gave great relief, and afterwards the syr. scillæ co., as an expectorant, with directions to use as an emetic if required. The throat was also well rubbed with a liniment of ammonia and goose oil, and a warm foot bath given.

I saw the child the following day, February 26th. He was almost as well as usual; there had been no return of spasm, but the cough was still hoarse and brassy. At 9 p.m., the same day, was again sent for. Found him very restless, breathing with difficulty and frequent return of cough, which was not so hoarse in character as before, but accompanied with spasmodic efforts to breathe. The dyspnoea was becoming very great, and his whole appearance indicated that the blood was becoming poisoned. Having now no doubt that it was membranous croup, I gave alum emetics frequently, and applied hot fomentations to the throat diligently. The emetics did not produce any beneficial results, nothing but the contents of the stomach were ejected.

I remained with the child during the night. The symptoms increased in severity, and he suffered terribly from dyspnoea. The *alae nasi* were dilated; breathing was abdominal and very little air entered

the chest during the inspiration; lips and fingers became livid, and the child's struggle for breath was intense.

Considering that death was inevitable in a few hours unless relief could be given by an operation; I advised the parents to allow me to perform tracheotomy, and after some demur gained their consent. The operation was performed at 5 a.m., Feb. 27th, by candle light, Dr. Trenholme assisting me. Chloroform was administered. The incision was made higher up than usual, owing to the extremely large size of the anterior jugular veins, which latter were distended to the size of the little finger, and, as we were afraid that the hæmorrhage would be excessive, I cut immediately above the junction of the veins, so that the amount of blood lost was inconsiderable. The trachea was entered without trouble, being held stationary by a hook, which latter, however, did its office very imperfectly. Some time was lost in inserting the tube, and just as insertion was accomplished, breathing had ceased and life, to all appearance, seemed to be extinct. Artificial inspiration was resorted to, and, after a few moments, we had the satisfaction of seeing respiration return, and the boy breathe easily through the tube. The tube was a double one of silver.

Two hours after the operation, he was lying quiet, but little blood came from the wound, and, excepting occasional efforts to cough, he was quite comfortable. I prescribed aconite, ipecac. and quinine, and a demulcent diet, and as much moisture as possible to be inhaled. I saw him frequently during the day, and was obliged each time to remove the tube and clean it. Toward the latter part of the day I obtained a larger inner tube, which was inserted with benefit.

Feb. 28th.—Respiration slightly hurried, child otherways comfortable and sitting up, playing with toys. Tube fills up frequently with tenacious mucus which is occasionally coughed up through the tube. During the day a piece of what appeared to be false membrane was drawn out by the father, and I had hopes that the operation would be successful. I obtained a small spray producer, and from time to time directed it against the tube, and by this means was enabled to prevent the tube from filling up, as the sputa could without difficulty be forced out. Occasionally, during coughing, frothy mucus would be expelled from the mouth. There was some fever, and the pulse was 96. A large quantity of fluid was drank during the day, principally of milk.

March 1st, 10 a.m.—Respiration more hurried, coughs a great deal, and a large quantity of mucopurulent fluid ejected from tube; pulse 120. Temperature of body increased. On auscultation, found bronchial rales over the entire chest. Dullness on percussion over lower part of both lungs. Prescribed ammon. carb. with ipecac. and seneka.

The inner tube was removed, the other remaining in opening without moving,

7 p.m., same day.—Worse; all symptoms increased in severity; very restless; great thirst; respiration hurried; pulse 140. Tube remains clear, but a large quantity of mucus expelled. Dullness on percussion increased and extended upwards.

On auscultation, moist rales heard over both sides.

From this out the child continued to grow worse. Became exceedingly restless; refused his medicine and beef tea, but would drink milk. Dyspnoea became greater till death closed the scene at 5 a.m., next morning.

The only post-mortem examination made was upon the throat; shreds of false membrane were still adherent to the upper part of the trachea, and the glottis and epiglottis were swollen and thickened. The wound of the operation looked well, and there had been but little inflammatory action on the adjacent tissue. Death must have resulted from the ensuing broncho pneumonia, and perhaps this had existed previous to the operation.

The tracheotomy did not save life, it prolonged life and possibly made death easier.

Another child was taken down in the same manner in the same house during my attendance on the above case. This latter I actively treated with emetics of sulphate of copper, which I now think is to be preferred to any other emetic in croup. In addition, small doses of ant. tart. and hydrarg. were given frequently with an expectorant of ipecac. and seneka, while externally the attendant nurse rubbed in the liniment of ammonia so diligently as to produce blistering, which I believe was also beneficial. This child recovered. Since the above case was treated, I have seen an article in the American Journal of the Medical Sciences for April, 1873, in which Dr. Ehrhardt, of Illinois, cites four cases, one of which was diphtheria, the other croup. Tracheotomy was performed in all with the result of saving two of the children. The emetic used in each croup case was sulphate of copper. The chief medical treatment being chlorate of potash, a teaspoonful of a saturated solution every hour, and adding quinine and expectorants as required.

Three Cases of True Membranous Croup, or Pseudo-Membranous Laryngitis. Tracheotomy performed in one Case. Fatal issue in all, by FRANCIS W. CAMPBELL, A.M., M.D., L.R.C.P., Lond., Professor of Physiology, University of Bishop's College, Montreal, (read before the Medico-Chirurgical Society of Montreal, May 22, 1874.)

On the afternoon of Nov. 27, 1873, I was called to see the little child, aged $2\frac{1}{2}$ years, of Mr. C. W., a gentleman of wealth and position. I found the infant on its mother's lap, tossing about in its endeavors to get breath, with that characteristic whistling sound, indicative of the real character of the disease. I at once placed the child in a warm bath, and gave it a mixture of compound syrup of squills, ipecac and Flemings tincture of aconite, which was to be given every half hour till my return. At 6 p.m., I visited the child, and met Dr. Major in consultation; there was apparently some amelioration in the symptoms—the cough was at times a little broken; it had vomited several times, and the skin was acting freely. I suggested the lime vapor bath, which was agreed to by Dr. Major, and having set this in operation, I left. At 9 p.m., I returned and found the child decidedly worse, all the symptoms were aggravated. Dr. R. P. Howard and Dr. Major met me in consultation, when the following mixture was ordered:—

Potas bromid,	ʒ iij.
Potas iod.,	ʒ i.
Senek fld. ext., (Tildens)	ʒ ii.
Vinum ipecac,	ʒ ii.
Belladonna fld. ext.,	gtt ix.
Tinet opii, co.,	ʒ v.
Aquæ,	ʒ viii.

A dessert spoonful every two hours.

Cold cloths were instructed to be kept constantly around the throat, and with a view of promoting if possible, the expulsion of the false membrane. A half grain of sulphate of copper was ordered, to be given every fifteen minutes. I remained, and carried out the treatment throughout the entire night. At first, the cold applications and the action of the sulphate of copper (which did its work most effectually), seemed to afford marked relief, so much so indeed, that several friends, who had intended remaining all night, went home, satisfied that a change for the better had occurred. About 3 a.m., (28th,) the character of the breathing again rapidly became stridulous. At 4 a.m., it was impossible for the child to remain in one position for a moment, so fearfully

did it struggle for breath. At 5 a.m., it became insensible, and shortly after died.

The family in which this case occurred is large; all the children have been subject to severe attacks of bronchitis, but this is the only case of croup which has taken place among them.

Case 2. I was sent for on 3rd of April last, to visit Alice Louise, child of Mr. Murphy, plumber, residing on Cemetery street. The child was hot and feverish, with a hoarse, croupal cough, brown tongue, and pulse of 120. She complained of uneasiness over the larynx, but the breathing, although somewhat husky, was perfectly free. On auscultating the chest, which was done with difficulty, no signs which could be deemed reliable, as indicating extension of the inflammation down the bronchi, could be heard; I directed sinapisms to be applied to the front of the chest, extending them over the larynx, and to be repeated every four hours, and the following mixture:—

Potas bromid,	℥ ii.
Syr scillæ co.,	℥ iss.
Vin Ipecac,	℥ ii.
Aquæ ad,	℥ viii.

A dessert spoonful every two hours.

The child to be removed to an inner room, to avoid the cold air, to which it was exposed, from a door which opened directly from a gallery into the room in which I saw it.

April 4. During the night I was sent for, but being engaged at an accouchment, did not see it till early this morning, when I found all the symptoms of true croup present. I then applied hot fomentations and finally hot linseed poultices over the trachea, had the air of the room rendered moist, and gave vinum Ipecac as an emetic. It acted freely, but without any apparent relief to the symptoms, and at 8 p.m. the child was in painful struggles to get breath, at 9.30 p.m., it died.

Case 3. On the morning of the 3rd of May, 1874, I was requested by Mr. Y., residing on Courville street, to see his little child, aged 2 years and 17 days. The case was not mentioned as being urgent, and I did not reach the house till well on in the day, when the mother told me that three days previously the child had begun to cough, and although it nearly always was of a croupal character, yet it sometimes seemed broken; that the previous day she had seemed much improved, but with a sudden change in the weather the previous evening, the cough again became hard, and during the night the child had been very restless, sleeping but very little. I found

the little sufferer on her mother's lap, tolerably quiet, spasms of coughing occurring every few minutes; the cough having a loud, hollow sound; the breathing was hurried, 30 in a minute, and was whistling and dry in character; the larynx being forcibly elevated and depressed with each respiration. The child's face had a distressed look; the eyes were prominent; considerable heat of skin, and but little moisture. Pulse 130, and irregular in volume. I attempted to auscultate the chest, but as the child was fidgety, and began crying, I made nothing whatever of my examination. I ordered mustard over the trachea, to be followed by hot linseed poultices, and the air of the room to be made moist, also the following mixture:—

Syr scillæ Co.,	℥ iss.
Vinum Ipecac,	℥ iii.
Senek Fld. Ext,	℥ iv.
Potas bromid,	℥ ii.
Aquæ ad,	℥ viii.

A dessert spoonful every two hours.

Later in the evening I returned, and was informed that after each dose of the mixture, the child had vomited freely, bringing up large quantities of thick yellow matter; that the cough was decidedly broken and not nearly as frequent, and that several times it seemed more playful. It had also slept at intervals. I remained about half an hour, and the only improvement noticeable to me was that the paroxysms of cough were not so frequent or so long, but they were still croupal in character. This latter fact, the family attributed to the fact that the last dose of the mixture, given a short time previous to my visit, had not produced emesis. The respirations were as frequent, and of the same character, and the pulse was higher than at my previous visit. I directed that the child should be given Ipecacuanha wine in doses sufficient to produce emesis, provided the mixture had lost its power of doing so; that the temperature of the room should be raised to 70° Fahr., and that another bucket of hot water should be placed in the room, into which hot bricks should be plunged every 15 minutes, with a view of increasing the moisture of the atmosphere.

May 3rd, 1874.—Shortly after 4 o'clock this morning I was aroused by the child's father, who told me he was fearful that the child was dying—that neither the mixture or the Ipecacuanha wine had had any effect. I suggested a consultation, and Dr. Finnie met me at 6 a.m. We at once saw that the child was dying, and that internal remedies were

useless. Dr. Finnic suggested tracheotomy, and although I felt from the history of the operation not only in this city, but on this continent, that the chance of its success was almost *nil*, yet as it was the only chance the child had we decided to recommend it. This we did, and the consent of the parents having been obtained, we proceeded to make preparations for the operation. So rapidly did the course of the disease progress to a final issue, that by the time everything was in readiness it was admitted by all that a very few minutes would terminate the child's life. The child being placed on a table, and the shoulders elevated so as to allow the head to fall back, and thus bring the trachea into prominence, I proceeded to cut down. A good deal of trouble was experienced from a vein or two which were cut across, but torsion soon stopped the bleeding. The trachea being reached some difficulty was had in steadying it, for when pressure on the rings was made by the knife it rolled from side to side—a tenaculum failed to steady it; this was finally accomplished by steadying it by a finger on each side. I then cut three rings, and was bespattered by blood and mucus—for an instant the child seemed lifeless, but the tube being introduced respiration was resumed. The relief was most marked, and apparently from the borders of the grave the child was brought back to have another chance for its life. Everything being securely fixed, the child was placed in bed, and was soon asleep. The temperature of the room was raised to 80° and moisture kept up. I remained till 9 a.m., and left the child sleeping comfortably, having previously ordered the following:—

Quin Sulph.,	gr xvi
Tr Ferri Mur,	3 ii
Potas chl	3 ss
Vinum Ipecac,	3 ii
Syr Simp.	3 iss
Aquae, ad	3 iv

A tea spoonful every two hours.

12 m.—Child very comfortable—slept a good deal. Respirations 24 per minute. Pulse 160, full and irregular in volume, has taken fluids, beef tea, &c., with avidity. Is cheerful, has noticed some of its play things; bowels moved, tube cleaned only once, and is now quite free.

An ingenious arrangement was adopted for keeping up the moisture. A small hose was attached to a boiler in the kitchen, and conveyed by means of this rubber tubing into the bedroom, into

which it discharged large volumes of steam. The room in this way was kept very moist—temperature of bedroom, 84 F.

4 P.M.—Still the same. A student in attendance, who has cleaned the tube three times. Respiration 24, pulse 160, temperature of room 86 F. and moist. Auscultation gives respiratory murmur quite clear. Takes food well.

9 p.m.—Same report.

May 4.—Student reports the child somewhat restless during the night—the tube requiring cleaning about every half hour. Respiratory murmur still clear. Bowels moved; pulse 180 and very full, still takes food with great avidity.

2 p.m.—Sent for in great haste, as child had a severe convulsion—had another before I reached the house—found her comatose, both pupils dilated, respirations 38 per minute, pulse small and impossible to count, large accumulation of mucus in bronchial tubes. Child never rallied, but passed quietly away at 3.30 p.m.

Progress of Medical Science.

ABSTRACT OF A LECTURE ON CHLORAL AS AN ANÆSTHETIC DURING LABOUR.

By W. S. PLAYFAIR, M. D., Prof. of Obstetric Medicine in King's College, Physician for Diseases of Women and Children to King's College Hospital, and Examiner in Midwifery to the Royal College of Physicians.

"The means at our disposal for lessening the sufferings of our patients during labour must always be a subject of great practical interest to the accoucheur. The administration of chloroform during the second stage has become so established a custom among many, that it is perhaps hardly necessary to say much with regard to it. The more experience, however, I have of its use, the less I feel bound to say, do I like it as an anæsthetic during labour; and this, not because it does too little, but on account of its tendency to do more than we wish. While, in certain cases, when given with judgment, only during the pains, and not until these have become strong and forcing, it answers admirably, soothing the patient's suffering without retarding her labour or producing complete anæsthesia; in others, it has an unquestionable tendency to diminish the force and frequency of the uterine contractions. I know not what may have been the experience of others, but my own certainly is that in a large number of cases it has a very marked effect in diminishing the strength of the pains, and thereby very materially lengthening the continuance of the labour. Over and over again,

when the administration of chloroform has been commenced, I have observed the character of the pains completely to alter, and again recover their former efficiency as soon as the inhalation was suspended. Besides this, I have no doubt that a very continuous use of chloroform during labour has a marked effect in predisposing to post partum hemorrhage, inasmuch as the tendency to undue relaxations of the uterine fibres continues for some time after the birth of the child. Although I by no means intend by these remarks to advise you not to use chloroform during labour, I certainly do think that it ought to be given with a greater degree of caution, and perhaps more sparingly, than the recommendations in many of our text-books would lead you to believe to be needful. The susceptibility of patients to its action seems to vary much, and therefore it is all the more necessary that its effects should be carefully watched in each individual case, and the amount administered regulated accordingly.

While, in my judgment, chloroform is apt to be too freely and incautiously used, the administration of chloral as a means of lessening the pains of labour is, I think by no means as yet appreciated at its proper value. It has this immense advantage over chloroform, that it does not seem to diminish the strength and intensity of the pains, while it very markedly diminishes their painfulness. It has also another great recommendation, that it is chiefly applicable at a period when we would not think of administering chloroform—towards the termination of the first stage of labour, before the complete dilatation of the os, and when the sharp grinding pains perhaps produce more suffering and are less easily borne than the more forcing pains of a later stage. There is a type of labor very common, especially in women of a highly-developed nervous organization, such as constitute a large proportion of our patients among the higher classes, in which I have found it to be specially valuable. In these, before the rupture of the membranes and the complete dilatation of the cervix, the pains are very severe, but short and ineffective, chiefly limited to the back, and producing little or no effect in dilating the os. Hours and hours really intense agony often elapse, until the patient is wearied and exhausted by her fruitless sufferings. In cases such as these, a common and very useful practice has been to administer a considerable opiate, so as to produce some hours of refreshing sleep, after which we expect the labour to recommence with fresh vigour and effect. The disadvantage of this plan, however, is that during the action of the remedy the labour is suspended, and much time thus lost. If, however, chloral is administered instead of the opiate ordinarily employed, the probabilities are that the same refreshing rest will be obtained without any suspension of the pains or protraction of the labour. The character of the uterine contractions will be observed to alter; they will become steady and useful, but they are not suspended. Another condition frequently associated with the former is rigidity and spasm of the cervix. Very generally in this class of cases the cervix is thin and rigid, with a sharp edge. Soon after the chloral has taken effect the tissues

seem to relax, and I have not unfrequently observed a thin os, which had remained unaltered in character for many hours, dilate rapidly under the influence of the remedy, far more so than when chloroform is inhaled for this indication. It is not however, only in cases of this kind, which may be classed among abnormal labours, that the use of the drug is of value, although it finds perhaps in them a more special application. It may, I think, be very generally and advantageously exhibited in perfectly natural labour, for the specific purpose of lessening the sufferings of the patient. When judiciously given the patient falls into a drowsy state, not quite asleep but nearly so. She is roused as a pain begins, but suffers comparatively little; and experienced women, who have the recollection of former labours to guide them, bear strong witness to the immense relief thus obtained. I have given the remedy in this way for the past two years in most cases I have attended, and I have no reason to think that any bad effects have followed its administration. I have very carefully watched the intensity of the contractions, and I have not the least ground for thinking that it has any effect in diminishing either their frequency or their force.

"The way I give the drug is as follows: I order a six-ounce mixture, containing a drachm and a half of the hydrate of chloral. When the pains are becoming severe, and I deem it advisable to employ the anæsthetic, which is generally not until the first stage of labour is approaching completion, I give one-sixth part of the mixture—i. e., fifteen grains of chloral. This I repeat in about twenty minutes; and usually after the second dose enough has been taken to bring the patient sufficiently under the influence of the remedy. Its further administration must now be regulated by its effects. If the patient is drowsy and relieved, a third dose need not be given for three-quarters of an hour or an hour; and then half the quantity will probably suffice to keep the patient in a sufficiently somnolent state. It is seldom necessary to give more than a third dose; and I have never given more than a drachm of chloral during the entire labour. In this way, lessening the quantity after the second dose, and increasing the intervals between their administration, a full and sufficient effect can usually be kept for many hours. I feel certain that any who give this method a fair trial will appreciate its value.

"The exhibition of chloral in this way is no novelty. It has, I believe, been recommended more than once in our journals; but, so far as I know, it has never come into anything like general use as an anæsthetic. Bear in mind that it need not at all interfere with the exhibition of chloroform. When the pains get strong and forcing, that may be inhaled just as if chloral had not been given, only a smaller quantity will probably suffice. As our patients suffer less, they are also less urgent in their demands for the commencement of the chloroform inhalation; and thus there will be less likelihood of those evils I have mentioned to you being produced."—*Lancet*, Feb. 21, 1874.

INTERCOSTAL NEURALGIA IN WOMEN.

By J. MILNER FOTHERGIL, M.D., M.R.C.P.

There is no more marked form of disease than this particular form of neuralgia. It is commonly met with among the out-patients of every medical charity, and even in private practice. Indeed, it is the commonest affection met with among women of that class where neuralgia, unconnected with diathesis, might fairly be expected—viz., among those where nutrition is defective: an essential in the production of neuralgia. It belongs to the productive period of woman's existence, and is but comparatively rarely seen after that time, and never, in my experience, before it. It is a troublesome and intractable malady unless approached vigorously and with relation to those disturbances of the reproductive organs with which it is so intimately associated. In almost every instance leucorrhœa is present, usually either with amenorrhœa or menorrhagia: and in those cases which are not accompanied by leucorrhœa, the woman is usually suckling.

The pain is truly neuralgic, that is, according to Austie, it comes in recurrent waves, or gusts, and is one-sided. I have never seen a case of this form of neuralgia where the pain was on both sides, and but rarely where it was on the right side. It is a left-side pain essentially. It is commonly called "pain in the side," and its truly neuralgic character is overlooked. A patient suffering from this affection gives a history to the following effect:—She is weak and feeble, with black spots before her eyes, and has pain in her side and betwixt her shoulders, and very commonly dyspepsia, or constipation. In addition to this she admits more or less reluctantly that she is much troubled with leucorrhœa, and usually has some uterine derangement. In the cases where this is not the case, she is suckling. In appearance she usually presents a debilitated aspect, and very commonly is a dark and sallow woman of lymphatic temperament. But by no means necessarily so; and women of a totally different character are found as sufferers from this feminine scourge. The tongue is usually clean, bright, and often silvery, without change of size, except in advanced or aggravated cases, when it is swollen and indented by the pressure of the teeth. She complains of pain in the side and betwixt the shoulders, and the painful spots are very tender upon pressure. In reality, these are the tender spots of Valleix; and one is found over or near the left apex, and the other at the posterior spinal rootlet of the nerve. The nerve usually affected is the sixth intercostal. Such is the malady in its ordinary aspect, and its features are singularly unvarying; so much so, indeed, that when "pain in the side" is complained of, the symptoms can be rapidly run up, often much to the patient's astonishment. This is specially the case as to the uterine connections, which are often carefully concealed, and only admitted when the question is pressed.

As a rule it may be said these cases are found among the married, and among servants who work hard and take little care of themselves; indeed, they often scarcely know how, if they had the time, to

do so. In rare cases women past the menopause have this ailment, commonly with its ordinary accompaniment leucorrhœa, at other times without it. It is a disease of debility whenever met, and is free from any association with those affections, syphilis and malaria, so productive of neuralgia. At times it is found in girls who are decidedly anemic, and verging upon chlorosis: and tedious and ineffective is the treatment where the relations and concomitants of the neuralgia are overlooked, either from ignorance or carelessness.

The prognosis of the disease, like that of neuralgia generally, is good; but the progress is much affected by the treatment, and that again depends much on the knowledge of the ailment possessed by the medical adviser.

Treatment.—This must be conducted partly on general principles, partly in reference to the special indications. As to the first, we must remember the other two characteristics of genuine neuralgia given by Anstie—viz., that it is aggravated by all depressing agents and by increasing debility, and also that it is relieved by general improvement of the condition, and by the agents which tend to induce the latter change. My usual rule has been to give a combination of stimulants and tonics, and specially carbonate of ammonia with the ammonio-citrate of iron in an infusion of quassia. In a little time this may be advantageously changed for sulphate of quinine, muriate of iron and quassia. Recently, however, I have accompanied my friend Professor Ferrier to the West London Hospital and compared notes with him. His favorite treatment is to give the well-known mixture of gentian and rhubarb. In many cases where the gastric symptoms are marked, this plan was unquestionably successful; but in others the plan adopted by myself is more effective. The change, however, is almost certainly effective. In addition to this exhibition of internal remedies, belladonna plasters and the local application of mustard have been tried; but of course it is difficult to say with what effect, as other measures were combined with them.

The absolutely necessary part of the treatment is the attention of the local discharge. Whether this discharge is vaginal or uterine I do not know, not having investigated the point. The use of the cold hip bath, or where this is impracticable, or is badly borne, cold water bathings of the parts night and morning are necessary. To this may be added in more obstinate cases injections, either of cold water or the ordinary astringent mixtures. Without this local treatment is properly followed out the progress of the case will be uncertain and disappointing.

Where there is menorrhagia the usual plans of treatment of that affection may be blended with the measures given above. The remedies indicated in these cases are, however, rather of an astringent nature; their constipating effects being avoided by the administration of laxatives. In all cases, indeed, the bowels should be attended to; and for this purpose aloes are well suited from their action on the hemorrhoidal vessels. The action of the skirts hanging from the waist and squeezing the contents of

the abdomen into the pelvis should not be forgotten; and every thing calculated to produce pelvic congestion should be avoided.

Where the affection is associated with suckling, the child should be weaned forthwith, or, at least, the breast should be reserved for the night.—*Obstetrical Journal of Great Britain*,

TREATMENT OF FUNCTIONAL DERANGEMENT OF THE LIVER.

Dr. Charles Murchison, in one of his Croonian Lectures, gives the following advice on this subject:—

First, in regard to *diet*, much more is to be expected from the careful regulation of diet than from physic. We ought to remember that the hepatic derangement of lithæmia may exist for years, and that it may be cured by a careful attention to diet only, but if neglected may go on to gout. Over-eating, especially of rich food, must be interdicted and above all saccharine and oleaginous cooked dishes. Even bread may have to be given up by the patient. Any idiosyncrasy must be ascertained. A simple diet of stale bread, fish, tea, etc., will be found best. The derangement may be due to over-much both of nitrogenous and non-nitrogenous foods, and it may be necessary to order a minimum only of both kinds. The chief meal of the day may have to be taken in the morning. Diluents, such as the mineral waters, may prove useful. Even greater caution should be exercised in recommending alcoholic drinks, especially malt liquors; many patients under these circumstances do better without stimulants at all. Alcoholic drinks, in amounts falling far short of affecting the brain, may undermine the health by their effects on the liver. The effect of sudden and complete abstinence is not so serious.

Secondly, a free supply of *oxygen* is, next to diet, highly important in the treatment of functional diseases of the liver. There is no doubt that exercise quickens the circulation, introduces more oxygen into the system, and operates beneficially on lithæmia. Observations have shown the value of sea-air, and patients with hepatic derangements and lithæmia will, especially under favorable circumstances, derive advantage from residence on the coast.

Aperients and cholagogues are of value in many cases, whether constipation is present or not. Aperients carry off not only bile but fluid from the intermediate circulation. The aperient salts are chiefly used. Certain other aperients have long had a reputation, as cholagogues, among which mercury stands pre-eminent. At the present day mercury has, however, lost much of its reputation, especially as a cholagogue. A practitioner gives a mercurial, and finds more bile in the stools and his patient relieved. A physiologist ties the common bile-duct, makes a fistula, and finds that less bile is discharged after the administration of mercury. The results of such experiments have indeed been contradictory. The general effect has been to discredit the cholagogue action of calomel very much. On the other hand,

it has been urged that the results of such experiments do not apply either to man or to the diseased state of the liver. Now, much of the difference of opinion may be reconciled if we remember the osmotic circulation in the abdomen previously alluded to. A large proportion of the bile which enters the bowel is reabsorbed and carried back to the liver. Mercury and some other drugs produce bilious stools because they sweep away the bile before it is absorbed; and it is for this very reason that they are to be found at the bottom of Röhrig's list of medicines which increase the flow of bile from the common duct. It would appear, therefore, that mercury is a true cholagogue, and that more than if it were a mere stimulant of the liver, and thereby induced congestion. It may also act on the gall-bladder. But there is reason to believe that mercury is of use in other functional diseases of the liver unattended with biliousness. Patients suffering from such diseases continually confess this. Mercury may indeed be useful for the very same reason that it is useless in promoting the healing process, namely, by helping disintegration. It is perhaps for the same reason valuable in some cases of crup and in constitutional syphilis. Be this as it may, the clinical evidence in favor of mercury is overwhelming. Podophylin acts much like mercury, but it has probably some affinity for the small intestine, and gripes more than mercury. Jalap, senna, etc., are all valuable. Röhrig seems to consider them true cholagogues. Colchicum has some effect in this way; taraxacum probably acts mainly as a mild aperient.

Alkalies, next to aperients, are the most useful drugs in functional derangements of the liver, especially a combination of alkaline salts. The waters of Vichy, Vals, and Ems are valuable for the same reason. The beneficial effects of alkalies are not due to the neutralization of acidity or of lithic acid, but to their influence upon the pathological state on which lithæmia depends. The administration of alkalies in lithæmia is, as a rule, well born, but it should be occasionally interrupted.

Chloride of ammonium, mineral acids, tonics, and opium may be used in these cases; but tonics should be given with the greatest possible caution, otherwise they may do more harm than good.

COUGH FROM ELONGATED UVULA.

Dr. C. B. Garrett writes to the *Lancet*:—It is no uncommon thing to find a person suffering from harassing cough, his health enfeebled, spirits depressed, appetite diminished, and body emaciated, whom no remedies have more than slightly relieved, and yet all owing to the local irritation caused by an elongated uvula. I feel perfectly convinced that in many instances it arouses the tubercular diathesis, and leads on to the development of phthisis, if not of other formidable affections. Cases are constantly presenting themselves to me of congestion of the lungs, which are clearly traceable to the existing agency of this lengthened appendage.

A person will tell you that he has a distressing, barking cough, especially in the morning, much aggravated by E. and N. E. winds, till a little secretion commences in the larynx, and he can "bring up the phlegm," and this may disturb him more or less during the day and night. There is also usually a sensation of there being something at the back of the throat to be swallowed. This is the prolonged uvula, which may often be seen with its apex lying on the tongue, after the fashion of a foot. I have often witnessed instances of a thin, long uvula being actually drawn up out of sight, as it were, by the action of the muscles in suddenly opening the mouth, and disclosing its longitude only by keeping the depressor on the tongue till the muscles were tired. The soft palate soon becomes flabby, the arches lax, and the fauces red and puffy. Now comes the second stage. The irritation and congestion travel onwards down the windpipe, the mucous membrane of which becomes thickened, and so cushions up the interior of the tube that the volume of air inhaled in natural inspiration is insufficient to inflate the lungs; the bronchial tubes collapse; the pulmonary blood-vessels become gorged, and congestion (our third stage) is established. The breathing becomes affected; the heart joins in the *melée*, with throbbings, even occasionally intermitting in its beats. With such unquiet neighbors the digestive system sympathizes, with loss of appetite, possibly retching (in a measure attributable to the irritation in the palate, etc.), flatulence, constipation and other systems of disturbed digestive functions. The urine throws down a sediment of lithate of ammonia, often clouded with mucus, and altogether there is a general disturbance of the whole system. Nor do the brain and nerves escape. Deficiency of memory, incapability of mental application, dullness of intellect, gloomy forebodings, abhorrence of society, occasional vertigo, restless, dreaming nights and staggering gait complete the category of doleful consequences arising, in the first place, from an elongated uvula!

Treatment is operative or medicinal, or both conjoined.

RECURRENT HERPES.

There are two striking differences of character in herpes; the one is that the eruption, as a general rule, is never repeated; the other is, that it recurs frequently. These extremes of difference, regarding the disease as a neurosis, appear to me to be due to the part or extent of the nerve implicated, and have induced me to group the various forms of herpes into such as are consequent on a morbid state of the trunk of the nerve, and such as are consequent on a morbid state of its peripheral branches. Herpes zoster is an example of an affection of the trunk of a nerve; and herpes labialis, progenerialis, &c., of its peripheral branches; and it is far from difficult to conceive that a mere temporary condition of the surface, or an emotional cause, may determine the one, while a deeply penetrating or deep-seated cause may be necessary for the development

of the other. Some degree of light may be thrown upon the subject by the narration of the following case:—

A little boy, aged five years, was brought to me in March, 1868, with a small patch of herpes on the left cheek, apparently the manifestation of a state of irritation of a branch of the superior maxillary nerve. The patch was single, about one inch in diameter, brightly red, and dotted over with a cluster of imperfectly-developed vesicles, which ended, after a few days, in small, yellow scabs. The symptoms accompanying the eruption were itching, heat, and a little smarting, and the whole duration of the affection was five days. I prescribed for him the syrup of phosphate of iron, and ordered that the eruption should be dusted over with a powder of oxide of zinc, calamine, and starch, with a little camphor.

In February, 1870, the little fellow was brought to me a second time, with two patches instead of one, but of perfectly identical appearance and nature, and on the same cheek; one being situated on the zygoma, the other near the angle of the mouth, and both within the region of distribution of the superior maxillary nerve. The eruption first appeared on Tuesday; he was brought to me on the Wednesday, and two days later the patches were fading and disappearing.

But the interesting feature of the case was the medical history of the child. For two years he had been the subject of a repetition of a similar eruption on the same cheek, every two or three months: appearing in the same way, disappearing quickly, and giving rise to scarcely any inconvenience; and he was brought to me, not on account of any suffering attending the disorder, but with the hope that I might suggest a means of preventing the continual recurrence of the affection. On inquiring carefully into the habits of the child, with the view to discover a possible cause for the morbid phenomenon, I ascertained that he was remarkably excitable, and that when crossed he would suddenly give way to violent fits of passion; such an occurrence had happened on Sunday night, somewhere about forty hours before the appearance of the eruption, and his mother had previously noticed that other attacks had followed upon these violent fits of nervous excitement. There was no other cause detectible, and I am therefore led to the conclusion that in this instance the cause of the herpes was an emotional stimulus of the brain communicated to the peripheral extremity of certain filaments of one of the divisions of the fifth pair of nerves.

In herpes præputialis it has been surmised that some specific cause might probably be present, but this explanation would be groundless in the similarly fleeting forms of herpes that occur upon the face. Herpes from irritation of the peripheral nerve—plexuses of the skin—is not only remarkable for its tendency to recur at intervals, but also for the small extent of the cutaneous inflammation, and furthermore for the absence of a rigorous respect of the middle line. A gentleman now before me has a patch of herpes on the middle line of the forehead at

the root of the nose. The patch is no bigger than a fourpenny piece, but it encroaches pretty equally on both sides; and I have frequently observed that, in a case of herpes zoster, there has been an intrusion of the eruption beyond the middle line, apparently due to intercommunication of the peripheral nerve—plexuses. Near the extremity of the eyebrow of the same gentleman is a small encrusted patch of herpes, now a week old,—that at the root of the nose having appeared within twenty-four hours. Then there is the stain of a previous patch of herpes at the inner extremity of the same eyebrow, and two similar stains on the nose near the middle line. But all these patches have appeared separately, chiefly on the right side of the face, and their average duration has been ten days.

He tells me that he has been tormented with this little annoyance for seven years, and that it recurs pretty regularly six times in the year. The appearance of two patches within the limit of a week had somewhat alarmed him; and that it was which had brought him to me. I found him somewhat debilitated, with a pale tongue and pale conjunctiva; he had been a good deal overworked for some time past, and stood in need of the remedy which I prescribed for him, namely, citrate of iron and quinine. There was no apparent explanation of the selection by the morbid process of the right side of the face.—*Erasmus Wilson, in Journal of Cutaneous Medicines.*

OBSERVATIONS ON PURPURA.

By DR. H. BROWN.

The subject of Purpura has from time to time occupied some attention in systematic medical treatises as well as in those works devoted to Dermatology, properly so called, and it presents many features of interest and a wide field for speculation. Some writers have not failed to take advantage of the opportunities thus offered; but, as yet, very little light has been thrown upon the causes of this affection. If we examine carefully the symptoms, and inquire minutely into the causes of scurvy, and then ask ourselves the question—How have scurvy and purpura come to stand in such close relation to each other? we get not a little confounded.

To call purpura *land scurvy* may be all very well; but it should not be imagined that the causes are the same which produce it and scurvy, properly so called. I confess I cannot find any strong resemblance between purpura and scurvy. The causes which produce scurvy are always constant, or nearly so, while purpura, on the other hand, occurs without any well-ascertained cause, so frequently, and under such opposite conditions, that the etiology of this affection is thereby rendered most perplexing and unsatisfactory. After all that has been written, the causes of purpura are still involved in obscurity.

Purpura and scurvy are two affections which differ so much in their nature, and are brought about by causes so widely at variance, that I cannot

consider them more than slightly allied to each other. We may class them under the head of "*general diseases*," and consider the most fitting place for them to be that of juxtaposition. But what comes of all our ideas of similarity when we have to treat these cases individually? Antiscorbutics have little effect in purpura; but some vegetables, without any medicines at all, will cure a patient of scurvy.

Sponginess of the gums and the occurrence of petechiæ are not to be considered pathognomonic of either. In many other instances these symptoms are present without purpura, or even a trace of discernible scurvy. The late Dr. Hillier, writing on the subject, has well said, "With the advances of medical knowledge, it is very likely that the cases even now classed together under the name of purpura, will be further distributed under several distinct categories according to their real pathological character."

Whatever change the blood may undergo in purpura, it is evident the capillaries of the mucous membranes and skin also undergo some alteration. Parkes has recorded cases in which iron was present in the blood in unusually large quantities in purpuric disease. If this be so, it is strong evidence that upon the deficiency of the iron salt of the blood, purpura does not depend. Again, in other cases, fibrin has not been found deficient, even although the blood is less coagulable than in other diseased states of the system. Upon this, however, little need be said, since we know so little, even in this advanced age, of the changes which may be readily effected, in short spaces of time, in the whole volume of the blood constituents under certain conditions. According to Fuchs, whose authority is quoted by the greatest Dermatologist of our age, Hebra, those "who are ill-fed, and who live in damp, close, and cold dwellings," are especially the subjects of purpura.

Suppose we grant this, and even more, how is it that so few cases occur in Great Britain and Ireland? Very few medical men have had under their charge more than a few isolated cases of purpura, and some also have not, in a long series of years, seen a single case of true purpura hæmorrhagica. Hebra has treated the subject of purpura, like all other authors, with an evident feeling of reticence. He cannot reconcile conflicting points; and with blood changes, and capillary alterations cropping up at every stride of imagination, he is at last obliged to confess—"Hence it is most probable that the circumstances enumerated above have but little influence in producing purpura, and that they have been brought forward only because they are well-known causes of so nearly related a disease as scurvy." This is certainly open-minded; but throughout Hebra's article, no light is shed upon this obscure affection. To assign "*telluric influence*" as a cause of purpura (and that only insinuatingly) is just making a worse job of a badly-constructed hypothesis. I have gone over everything of importance that I could find at all bearing upon the subject of purpura, and I confess I am now as much "at sea" as ever.

It is not very pleasant to have such a story to narrate; but let any man carefully examine what has been written upon the subject, and he will candidly confess that so far as regards the etiology of purpura, we know nothing at all worthy of being described under the heading "*cause*." The diagnosis is simple, and the results, in many cases, are too well mapped out.

The *treatment* is not always so well understood. Why some order lime juice, lemon juice, or citric acid, I cannot understand.

These we know are useful in scurvy; but they are next to useless in purpura.

Dr. Hillier, in his article on purpura, in "*Reynold's System of Medicine*," offers some good remarks at the beginning of "*treatment*;" but there is nothing striking throughout this recent article. I am afraid very few will now think of bleeding a purpuric patient. Salines may be of use, as Miller pointed out long since; but their use is very doubtful; and calomel and jalap may not be without some good properties; but active catharsis in purpura is, to say the least, open to grave question. Iron is unquestionably an excellent remedy; but it is often overrated. I think thirty drops of the tincture quite sufficient for one dose, and this dose can hardly be repeated oftener (if the iron be continued for some time) than every four hours. Few patients could take half an ounce of the tincture of iron in the twenty-four hours, for some days, without much inconvenience. Indeed it is difficult to understand how large doses can be administered for days together without untoward results. The large doses of turpentine, recommended by the late Dr. Neligan in this affection, could hardly prove of such signal benefit as to warrant their frequent use. How a patient, say a young lady, could be prevailed upon to swallow an ounce, or an ounce and a-half of turpentine, is more than I can comprehend. Larch bark tincture, on the other hand, in puerile doses, and a host of other remedies, have been recommended. Ergot of rye is undoubtedly a most useful and energetic stimulant; and in a work like the "*System of Medicine*," I cannot account for the omission of this potent drug.

Bark, or quinine, with the mineral acids, and an occasional purgative of a mild description, with judiciously-arranged dietetic treatment, offer the fairest chances of success in the treatment of purpura. As a hemostatic, ergot, in the form of tincture, liquor, or *ergotine*, is almost invaluable in this, as well as in many other affections, complicated with capillary hæmorrhage. Tannin, and other astringents, may be useful in purpura; but the use of such remedies cannot be continued for long periods without much detriment.

Hebra has said that "no universal rules can be given on the subject" of treatment of purpura.

This is very evident. The causes are not always alike that operate (so far as we can ascertain) in the production of the diseased state called purpura. At one time, the ill-fed, ill-clad, and miserable inhabitant of some wretched abode is the subject of purpuric disease; at another, the wealthy inmate of

some cosy dwelling is appointed to undergo the varying vicissitudes of this affection. Why, it is difficult to say; nay, is it not almost impossible? Apart from blood change, or changes, I cannot doubt but that the capillary vessels are the chief seats of the disordered condition; and in whatever way the lesions or changes in these vessels are brought about, there is an evident want of that tonic upon which depends the proper carrying-on of those vital functions with which every organ, blood-vessel, nerve, or organic constituent of the bodily frame at first become possessed, and upon the continuance of which health must ever depend.

In these remarks I have purposely avoided entering into the varieties of purpura, and many other points in connection with its etiology, as well as the treatment of the disease. I have also passed by many interesting matters in connection with the case given above, and so well described by Dr. Lindsay, to whose kindness I am indebted for the history, which I now present to the notice of the profession.—*Journal of Cutaneous Medicine*.

THE TREATMENT OF SYPHILIS.

The following very practical and sensible remarks of Dr. J. Hutchinson, of London, in the *British Medical Journal*, merit careful reading.

"The antidotal power of mercury in syphilis is in no degree of relationship to its full physiological influence; and the best cures are often those made most quietly. Now, these principles being kept in view, I do not know that there is much to be added as to detail. Begin early; continue long; do not salivate; such would be my rules. I have strong preference for one kind of mercurial preparation over another; but, as it is convenient to become familiar with one, I have in my own practice, of late years, almost restricted myself to grey powder. I prescribe it usually in pill, in doses of from one to three grains three times a day, and often in combination with Dover's powder. It is only seldom that an unlooked-for salivation occurs, and it is equally rare to have any trouble with the bowels. Most of my patients continue throughout at their ordinary occupations. A strong reason for preferring to give pills, instead of using inunction or the bath, is, that it is often essential to avoid confinement to the house, and also to run no risk of attracting the attention of the family. Inunction, which is still in general use over the continent, and is without rival at Aix-la-Chapelle, is a more or less dirty method; can scarcely be concealed from servants; and further, with our English ointment, is very prone to irritate the skin and bring out eczema. As I do not believe that it has any real advantages to compensate for these drawbacks, I never resort to it. The vapor-bath, as proposed by Langston Parker and modified by Mr. Lee, I have the fullest faith in, and have seen excellent results from it in certain intractable cases. It is, however, troublesome, more or less expensive, cannot well be used secretly, and for all ordinary purposes, it is not in the least necessary.

The grey powder does all that could possibly be wished. I must add to this, that I am always particular to use mercury sedulously to the local manifestations of the disease. The chancre is to be soaked with black wash; and to the skin-eruption an ointment of the ammoniochloride is almost always applied. If the throat become sore, a gargle of black wash or of the bichloride is usually prescribed.

“With regard to the dose, it ought to be sufficient to produce decided effect on the disease. If it be given for an indurated chancre, the hardness ought to begin to diminish within a week. The quantity required in order to effect this will be found as every one knows, to vary very much in different individuals. A few patients will be met with who appear to resist mercury in a most extraordinary manner, in whom it neither destroys the syphilis nor affects the constitution. As a rough rule, I always expect to have to give more mercury to dark complexioned patients than to others.

“The correspondent asks ‘if some preparations are more adapted to certain stages of the disease, say primary or secondary.’ In reply, I do not know of any special adaptation of this kind, but find the one I have mentioned the most convenient in all. The bichloride, which at one time I used to give largely in the later forms of secondary disease, I now rarely prescribe, having become more and more convinced that it is the mercury which is wanted, and not any special preparation of it; and that what is to be aimed at is mainly to choose that form least likely to irritate.”

NEW TREATMENT OF CANCER.

Another treatment of cancer has been brought out by Dr. Hasse, of Berlin. An account of it is given in the *Medicinische Central Zeitung*, February 18. Dr. Hasse injects, with a hypodermic syringe, pure alcohol, to which one per cent. of ether is added, not into the new growth, but around its edges, thus obliterating, he claims, the vessels, especially lymphatics, which convey the infection, and causing the atrophy of the growth itself. The pain is rather severe, but is much reduced by ice bags, and lasts only about two hours. The injections are repeated every eight to fourteen days, and have no alarming reactions. He claims striking success in carcinoma of the mamma, and in cauliflower excrescence of the uterus, but has failed in epithelioma of the lip, which he attributes to the impossibility of obliterating by this means the large and closely adjacent coronary artery.

EXTERNAL TREATMENT OF VARICOSE VEINS.

If Dr. Linon, of Verviers, is right in his reports of his treatment of varicose veins, many who suffer from them will thank him for his discovery, as it saves them the pain and danger of an operation. He says, in the *Tribune Medicale*, that he was for years treated such cases with success by swathing the leg in a flannel compress wet with a solution of chloride

of iron in water, forty-five grains to the ounce, and then applying a roller flannel bandage over it firmly for twenty-four hours. This is to be repeated daily for a week or two weeks, when the patient is, or ought to be, well.

ERGOTIN INJECTIONS IN PROLAPSUS ANI.

The eminent surgeon, Von Langenbeck, of Berlin, announces that he has lately been treating prolapsus ani “with astonishing success” by hypodermic injections of a solution of ergotin (five to fifteen parts to one hundred of distilled water). He replaces the bowel, and inserting the point of the syringe about three centimetres in depth in the cellular tissue, throws in from one to two grains of ergotin. This should be repeated every three or four days for three or four weeks, any hard fecal masses in the bowels being first removed by a simple injection. As a means of treating a most obstinate and troublesome complaint, this method, sanctioned by so eminent a name, deserves careful repetition.

HOOPING COUGH.

Dr. Stephens, of Ilminster, gives his experience with various remedies in this disease, in the *British Medical Journal*, as follows:—

I must give the preference, in an ordinary case, to small doses of compound tincture of benzoin, frequently repeated. If the cough be more than usually spasmodic, I find dilute hydrocyanic acid, combined with bromide of potassium and camphor mixture, very serviceable; in the latter stage of the disease I much prefer alum, combined with dilute nitric acid and gentian, to any other astringent tonic; although in all cases everything depends upon the diathesis of the patient. I was greatly disappointed in the use of chloral hydrate, as in one case only could I detect the slightest benefit.

TREATMENT OF GRANULAR LIDS.

In a clinical lecture on this subject, in the *Irish Hospital Gazette*, Dr. Swanzy remarks that the first and most important thing is to provide abundance of fresh air, both within doors and without. The patients should never be allowed to remain moping in the house, as he is apt to do, but should be made to take several hours open-air exercise daily. More, he is convinced, may be done in many conjunctival diseases by fresh air alone than by any other treatment without it. It probably acts directly and locally on the conjunctiva, and not in any round about way through the constitution. When vascular reaction is insufficient for the absorption of the granulation, it should be excited: when excessive, it should be restrained. Hyperæmia may be excited by warm fomentations and by sulphate of copper. Excessive leucorrhœa may be checked by nitrate of silver solution, containing ten grains to the ounce, applied by means of a camel-hair brush to the com-

pletely averted upper lid. A little solution of common salt should be at hand to remove excess, and this again may be washed away with plain water. The effect can be modified by the length of time the solution of the nitrate is allowed to remain in contact with the membrane. When the leucorrhœa is only slightly in excess, the liq. plumbi subacet. dil. of the Pharmacopœia, without spirit is an admirable thing; it also should be washed off with plain water, and its use in this way is not contraindicated by the presence of ulcers on the cornea. It is most important, in using any local application, to thoroughly evert the upper lid, in order that that part of the membrane may be reached which is reflected from the lid to the globe, for a neglect of this part may render the treatment abortive. Fresh cases of acute granular ophthalmia (military or Egyptian ophthalmia) do not require any topical application. Ice compresses alone may be placed on the lids, a leech or two at the inner canthus, and the patient should be purged.

URETHRAL FEVER FROM CATHETERISM—ITS NATURE AND TREATMENT.

BY J. W. S. GOULEY, M.D.,

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When an instrument is introduced into the urethra, for the purpose of exploring the bladder, for drawing off the urine, or for dilating a stricture more or less grave, local and constitutional accidents sometimes supervene, and such casualties are most frequently the result of violence: but occasionally cautious, gentle, and successful catheterism is followed by alarming symptoms and even by death.

These constitutional manifestations are: 1st, Rigors with febrile reaction, sometimes followed by suppression of urine, and spoken of under the generic term of urethral or urinary fever.* 2d, Pyæmia.

It is a well-established fact that urinary or urethral fever arising from violence to the urethra or bladder is "due to shock propagated by the sympathetic nervous system and reacting upon the blood vascular system," and that there is some analogy between this ailment and malarial fever; hence the additional title of *intermittent* urethral fever. Urinary fever may be ushered in by a very slight rigor, or even only by a sense of formication or of horripilation, followed by little if any febrile reaction, or the attack may be of the most violent, overwhelming, fulminating character, similar to congestive remittent fever of the severest type, and may cause death in an extremely short space of time. Mr. Banks relates the case of a man between forty and fifty years of age, apparently much broken down in health, who was treated at the

Liverpool Royal Infirmary for urethral stricture. There was a false passage in the urethra, and the first catheterism failed, but the second was successful (No. 6 or 7 catheter), and though difficult "no undue violence was used and very little pain was complained of; there was no bleeding and nothing to indicate that there was any lesion of the urethra, except the pre-existing false passage, but almost immediately after the entrance of the catheter into the bladder the man was seized with a severe rigor. The instrument was at once cautiously withdrawn, but the patient passed into a state of profound syncope, and in a few minutes died." No autopsy could be obtained, but the existence of a flabby heart was strongly suspected.† Mr. Banks also gives the account of a typical case of urethral fever, from catheterism, proving fatal in six and a half hours after the passage of the instrument. In this case, the stricture, which was long and narrow and in the pendulous portion of the urethra, had been gradually dilated to No. 4. On the first day a small probe only could be passed, and was left in for half an hour. On the third or fourth day, Nos. 1 and 2 metallic bougies were tried but failed and a fine probe-pointed bougie was passed and left in ten minutes, and two minims of Fleming's tincture of aconite given. The dose of aconite was administered after each catheterism, which was practised every four days. On the next occasion Nos. $\frac{1}{2}$ and 1 were passed through the stricture, and after these a fine catgut bougie which was left in for an hour. When removed it was found still tightly grasped, and on this and each succeeding occasion a stream of urine followed the withdrawal of the instrument. In this way the urethra was dilated, chiefly by catgut bougies, till the fatal day, when No. 4 metallic bougie was passed through the stricture into the bladder for the first time. It went quite easily, was removed in about ten minutes, and was followed, as usual, by a stream of urine, but no blood came. The customary dose of aconite was given. In about half an hour he vomited his dinner, and soon had a rigor. In two hours he had another rigor, still continued to retch, and had a rapid pulse. Another two-minim dose of Fleming's tincture with brandy and water, but this was soon vomited, and nothing could be kept down afterwards. He then began to complain of pain in the region of the bladder and in the loins, the pulse became quicker and weaker, and in spite of all that could be done the retching continued, and he died, having lost consciousness but a moment before, in six and a half hours after the last catheterism. The autopsy revealed a long stricture commencing at about two inches from the meatus. No injury whatever had been done to the urethra. The organs were all perfectly healthy. No congestion of the lungs. In the bladder was about a teaspoonful of thick, muddy urine. The kidneys were examined

* Urinary fevers occur very frequently in cases of urethral, prostatic, and vesical trouble, where no instruments have ever been passed, and is then an indication of the existence at least of renal congestion. But in these instances it is—with the exception of cases of far advanced disease—of a milder type than when it occurs from instrumentation, and is often mistaken for malarial fever. The removal of the cause of vesical trouble or of urethral obstruction soon cures this form of "ague."

† "On certain rapidly Fatal Cases of Urethral Fever after Catheterism." By W. Mitchell Banks, F.R.C.S.E., Lecturer on Anatomy in the Liverpool School of Medicine. *Edinburgh Medical Journal*, June, 1871, p. 1174. The reader is referred to Mr. Banks' excellent article for some very important and interesting particulars regarding this subject.

with great care. They were slightly congested, and on pressure a thickish, turbid urine escaped from the calices, but beyond this no disease was found.

Similar cases were mentioned by Reybard, Velpeau, and others, but in most instances death has not been so sudden as in the foregoing cases of Mr. Banks; twelve to twenty-four hours, or even more, elapsing between the catheterism and the fatal issue. In cases of urinary obstruction with renal complication, unless the precautions to be hereafter indicated be taken, urethral fever is almost certain, at one time or another, to follow the introduction of the catheter. The instrument may have been passed at regular intervals for weeks or months without any very great amount of pain and without giving rise to any discomfort, or it may have been followed on one or two occasions by a mild attack of fever, but finally the same careful catheterism is practised—but on the *wrong dug*, perhaps, when the patient's functions are temporarily disordered—and in a few hours he is suddenly and unexpectedly seized with a severe rigor from the effects of which he may never rally. Sir Henry Thompson reports a case in point at page 94 of his treatise on Stricture of the Urethra, third edition, London. He says, "I have seen one case of old standing and narrow stricture, in which death was thus caused within fifty-four hours of the passing of an instrument, the same that had been habitually employed on at least a hundred occasions before; no damage whatever having been inflicted by it upon the urethra, as verified by several careful observers on close post-mortem examination of the parts. Rigors and vomiting commenced about an hour after the catheterism, and not another ounce of urine was secreted from that time until death. The kidneys were congested to an extraordinary degree, and their substance was so soft and friable as to give way under gentle pressure. Very rapid changes had evidently taken place in these organs, but no signs whatever of inflammation existed in any other part of the urinary apparatus."

The grave type of urinary fever is a much dreaded, but now happily comparatively rare, accident of the operations of lithotripsy, lithotomy, internal and external urethrotomy and divulsion, as these operations are not resorted to, in our day, when advanced disease of the kidneys and of the bladder is suspected. In thirty-one operations of external perineal urethrotomy, there occurred but three cases of urethral fever, the attacks being mild in two, but fulminating in one which ended fatally in fifty-six hours.

Between these two extreme types—the very mild and the very severe—there is a form of urethral fever preceded by headache, malaise, pain in the back, and, in fact, all the premonitory symptoms of an attack of ague, in which the chill may be deferred four, eight, twelve, twenty-four or even forty-eight hours after catheterism or other operation upon the urinary organs. This is, however, amenable to treatment, and recovery may be expected in the great majority of cases. It has long been supposed that the chill is ushered in by the passage of urine upon a denuded surface, but such is not the case, as the

rigor often occurs before the first act of micturition, or when—the patient having been repeatedly relieved by the catheter—not a drop of urine has come in contact with the urethral canal. If the contact of the urine with the raw surfaces were the sole, or even the principal cause of this trouble, urinary fever would almost always ensue from lithotomy, internal and external urethrotomy, and divulsion; but facts are against this theory.

Suppression of Urine is a common complication of urethral fever, but, though frequently fatal, is not necessarily always so. Mr. Banks, in speaking of the rapidly fatal forms of urethral fever with suppression of urine, says:—"In many cases no urine is secreted from the moment the instrument has been passed to the time of death, and this non-secretion has too often been reported as the primarily fatal cause, without consideration of the fact that it is simply a secondary effect upon the renal organs of the great general shock, and, although without doubt greatly tending to precipitate the fatal event, should by no means be regarded as a primary cause, but only as a complication. This is shown, 1st, by the fact that persons have been known to die soon after catheterism that the mere non-secretion of urine could have had nothing to do with the fatal issue 2nd, Even when no urine has been secreted, and time has been given for the non-eliminated urea to act noxiously, the symptoms have not been those of uræmic poisoning."

Among the severe cases that I have observed, several showed symptoms of uræmic poisoning: some have recovered, the majority have died, and the pathological lesions of the kidneys were, intense congestion in some, in others infraction, while in others still—that lingered several days—there was interstitial nephritis in its various stages, to suppuration.

Suppression of urine may be partial or complete; the former is of frequent occurrence, while the latter is rare. The symptoms are, dull pains in the regions of the kidneys, no desire to void urine, some febrile reaction, thirst, sometimes vomiting of green bilious matter having a disagreeable urinous smell. The alvine dejections have the same urinous fetor, and the breath and the cutaneous perspiration are also offensively urinous.

Purulent infection occasionally follows urethral fever, although it usually occurs independently of this ailment; and the irregular chills which are caused by urethral pyæmia should not be confounded with those of urethral fever.

Treatment of Urethral Fever.—As the existence of renal disease is a strong predisposing cause of urethral fever, it is necessary, in case such disease is even suspected, to institute a preparatory course of treatment for several days before the intended catheterism be attempted; but I go further than this and prepare all patients—with the exception, of course, emergent cases—for five or six days before they are placed under mechanical treatment, and consequently now have, in my own practice, but very few cases of urethral fever to treat. The preparatory treatment which I usually resort to is as follows:—After free catharsis, rest should be

enjoined for a day or two, a hot hip bath ordered at night, a diluent drink three or four times daily, ten minims of tincture of chloride of iron three times a day, and five grains of quinine every night.

Quinine was first given in free doses for urethral fever by Bricheteau, who, in 1847, reported several cases successfully treated with doses of ten, twelve, and fifteen grains.* More recently, Ricord, who was not at first a believer in the efficacy of quinine in urinary fever, said, at the Surgical Society of Paris, that he had come to the point of never performing any operation upon the urethra without having previously administered quinine, and that ever since he had adopted this preventive treatment, the number of cases of urethral fever, so great before in his hospital service, had almost miraculously diminished. This alkaloid is doubtless one of the most effective of the remedial agents given to combat urethral fever, and should be administered in a dose of at least ten grains, with half a grain of opium after each catheterism, and, when necessary, should be increased to fifteen or twenty grains in the twenty-four hours.

Mr. Long speaks highly of two-minim doses of Fleming's tincture of aconite, for preventing rigors in cases where they had occurred after catheterism.† This is, I believe, another excellent remedy, but I would not take it in exchange for quinine. I have lately, however, given it in combination with quinine.

In the very mild cases of urethral fever, a hot drink of any kind, and rest for a few hours, will generally suffice.

When that ominous complication, suppression of urine, occurs, the case should be treated with the greatest caution; and, let me first say, the medical attendant should *beware* of administering stimulating diuretics. After the first catheterism—to positively exclude retention of urine—no instrument of any kind should be passed into the urethra. The next indication is to establish at once a vicarious excretion of the elements of the urine, if Nature in her conservative effort has not already done so. The skin and the intestinal mucous membrane should be made to do duty for the kidneys until the latter are in condition to perform their function. The *hot-air bath* is the most rapid mode of effecting diaphoresis, but as it cannot be given more than once or twice in the twenty-four hours, it is necessary to administer by mouth quarter of a grain doses of ipecac. every two or three hours, with hot borage tea, or any other diaphoretic.

Catharsis may be procured and kept up by any of the hydragogues; but small doses of sulphate of soda and of magnesia, in hot water, often repeated, will fulfil the object very well, without weakening the patient. Hot fomentations should be constantly applied during the day to the lumbar and hypogastric regions, and the loins should be freely dry-

cupped. Then a tea-spoonful of the infusion of digitalis* should be given every hour or two hours, and the effect on the circulation closely watched.

The whole cutaneous surface, which exhales sometimes such an offensively urinous odor, should be thoroughly dried and rubbed with a warm towel, at least three or four times in the day. The patient should be covered in bed, well nourished with concentrated mixed food, and, if he should become enfeebled by too profuse diaphoresis, a hot brandy toddy should be administered twice a day.

The patient is generally safe, if there be not advanced renal disease, as long as diaphoresis and catharsis can be kept up. Complete suppression of urine may last several days, but when the kidneys do not secrete urine in the course of three or four days, the chances of recovery are decidedly lessened. —*New York Medical Record.*

FETID CORYZA.

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The term *fetid coryza* appears to me better adapted than *ozæna* to designate the condition under consideration, though merely indicating a combination of characteristic symptoms—*discharge and odor*—attending disease involving the nasal passages, without defining its nature.

Fetid coryza is produced by various affections. It may be due to ulceration of the mucous membrane of the nasal passages or of the sinuses communicating with them, whether erythematous, catarrhal, glandulous, scrofulous, syphilitic, lupoid, or cancerous. It may be due to destructive disease of the bones or cartilages of the nasal organs, or of their periosteum or perichondrium; whether the disease be idiopathic, traumatic, or specific. It may be due to the development of adventitious growths in the nasal structures themselves, or in others contiguous to them. It may be due to the deposition of calcareous matters from the secretions, and their aggregation into rhinoliths or nasal calculi. It may be due to the retention of some external foreign body, introduced by design or accident, and to the inflammatory processes resulting therefrom. It may be due to some unfortunate individual or family idiosyncrasy without any ulceration whatever, and even with little inflammation or none at all. It may be due simply to retention of nasal excreta and their decomposition *in situ*.

We have, therefore, to interrogate the part and the system in order to make a satisfactory diagnosis as to the cause of the discharge in any given case, and to form a judgment as to the proper method of treatment.

In order to examine the parts they must be washed out as thoroughly as possible by the use of

* Des Fièvres Intermittentes Pernicieuses chez les vieillards. *Archives Gênerales de Médecine*, 1847.

† *Liverpool Medico-Chirurgical Journal*, January, 1853.

* The infusion should be used in preference to the tincture or the extract of digitalis, as it is known to be more effective as a diuretic than either of the latter.

the nasal douche, and syringes introduced anteriorly and posteriorly into the nasal passages; the best substance in general being tepid water impregnated with table-salt—a drachm to the pint. If this fails to detach the secretions, the phosphates of ammonia and soda or the carbonates of soda and potassa may prove more efficient in like proportion. Sometimes the forceps or the sponge-mop may be used to detach matters within their reach. In order to make a thorough examination of the parts, it is necessary that they be thoroughly cleansed. After the parts have been cleansed they can be examined before a strong light,—anteriorly by drawing the alæ aside so as to dilate the passage, or by introducing a speculum; and posteriorly with the rhinoscope. In this way we observe the appearance and condition of the mucous membrane, detect swelling, ulceration, retained secretions, foreign bodies, and morbid growths, exposed cartilage or bone, etc. The tortuous contour of the turbinated bones and nasal measures renders it impossible to examine these structures in their entire extent; but still, under a good light, they can be explored pretty thoroughly, especially with the aid of probes bent so as to admit of application to the surfaces of the various parts, on the same principle employed by the dentist in exploring the tortuous recesses in a carious tooth. Rhinoscopic inspection enables us to examine, in addition, the condition of the glandular tissue at the roof of the pharynx, a structure very frequently implicated in diseases giving rise to the discharge under consideration.

In some cases of fetid catarrh, the bones and cartilages of the nose, as far as their condition can be examined, appear healthy; and no ulceration of the mucous membrane can be detected on inspection anteriorly or posteriorly. There seems to be some constitutional idiosyncrasy in these cases, in consequence of which, retained portions of the nasal secretions undergo desiccation, and remain impacted in some portion of the sinuosities of the nasal passages; there undergoing decomposition. This condition of system has been compared to that which is attended by the peculiar, offensive smell of the cutaneous perspiration from the feet and armpits of certain individuals who cannot rid themselves of their unpleasant odor even by the most scrupulous ablution. In these idiosyncratic cases the discharge is by no means profuse, unless in exceptional instances. Sometimes, indeed, it is quite scanty; but it manifests a disposition to become desiccated into thin scales or crusts, removable only with more or less difficulty: sometimes by way of the nostrils anteriorly, and sometimes by a sort of inspiratory nasal screatus, which, after repeated efforts, forces them through the posterior nasal outlets into the pharynx, whence they are expectorated. These crusts usually emit a horrible stench, perceptible at a distance of several feet, and capable of impregnating a large room with their fetor.

All that can be effectually accomplished in the way of treatment in these cases, seems to be the promotion and maintenance of an active condition of the secretory functions of the skin and kidneys by

frequent bathing and copious water-drinking,—keeping up a sort of sewerage, as it were,—and the thorough and efficient cleansing of the parts several times a day, especially at night and morning, making this act a constituent and essential part of the daily toilet, as much so as the use of the tooth-brush or the wash-basin. For this purpose the nasal douche of Thudichum, or some modification of it, is the best contrivance in most instances; but if the crusts are hard to remove, the use of the pharyngeal nasal syringe and of the continuous rubber hand-bellows syringe will afford better results; the latter especially in those cases in which crusts moulded to the contour of the posterior nasal outlet are apt to accumulate, and to dislodge which, readily, a stream of fluid entering with some force from the front is requisite. The ordinary solution of table-salt—a drachm or two to the pint of tepid water—fulfils the requirements of the douche for cleansing purposes; and detachment of the crusts is facilitated by the substitution or addition, as may prove most appropriate, of equal quantities of alkalines, such as the carbonate or bicarbonate of soda, phosphate of soda, and the like. At least a quart of the cleansing solution should course through the nasal tract at each night and morning ablution; part of it started through one nostril, and the remainder through the other. After the parts have been cleansed, the douche should again be used, containing a disinfectant in tepid solution. Permanganate of potassa, chlorinated soda, carbolic acid, and so on, employed in this manner, will, in great measure, control the fetid odor of the secretions.

Various local applications are made at times for the purpose of altering the nutrition of the mucous membrane, in the secretion of the glands of which the diseased action is supposed to reside. For this purpose various preparations of mercury and of iodine, the terebinthines, muriate of ammonia, etc., have been employed in the forms of ointment, powder, solution, and vapor; but, at least in the hands of the writer, they have proved of only questionable benefit.

Local cleansing, with disinfectant detergent douches immediately afterwards, and the maintenance of the cutaneous and urinary secretions by appropriate remedies, have rendered good service; but, to be efficient, resort to these measures must be constant.

Fortunately, in this variety of fetid coryza, the affection, whatever its real nature, moderates in severity as the patient becomes older, so that by the middle adult life it has subsided entirely, or in great measure. It is a long while to await permanent relief, to be sure, but it is better than no prospect of cure.

Another form of fetid coryza, attended with certain local manifestations to be described farther on is engrafted upon the strumous diathesis; and this variety, from its persistence, and from its ultimate destructive results,—which, when very extensive and insufficiently attended to, resemble so much the effects of analogous conditions in constitutional

syphilis,—seems to contribute some force to the doctrine that scrofula is but an inheritance of syphilis; modified, it is true, but bearing a relation to that virus similar to that which some authors trace between varicella and variola.

These cases usually originate in an acute coryza or catarrh, the result of exposure to cold. This catarrh gradually becomes chronic, the attendant discharge more or less profuse, varying in color and consistence, being at one time muco-purulent, at another purulent, sometimes sanguinolent, and so on. The odor of the discharge is exceedingly offensive, and there is a permanently unpleasant odor of the patient's breath, rendering propinquity to the individual very disagreeable.

In these cases crusts of inspissated mucus accumulate at the outlets of the posterior nares from detention there of the secretions, and they often become moulded to the form of the opening, presenting, when discharged, a peculiar honeycomb-like configuration. These moulds are usually several days concreting, and become discharged perhaps once or twice a week, sometimes oftener, sometimes less frequently. When discharged at long intervals, small, dense clumps of irregular conformation, and of similar constituents, will be occasionally drawn into the throat by forced nasal inspiration, and be then expectorated. These will possess the characteristic odor. Sometimes small caseous like concretions will be hawked down, apparently from the glandular tissue at the nasal portion of the roof of the pharynx, similar in appearance to the analogous masses sometimes discharged from the tonsils, and, like them, of an intolerable stench when crushed. In some instances, desiccated crusts can be seen upon the glandular masses at the roof of the pharynx, on pharyngo-rhinoscopic inspection. When examined immediately after spontaneous or artificial removal of the crusts, this glandular tissue is seen to be spongy, and, if the removal has been forcible, is most likely to bear decided evidence of hæmorrhage. Pain will be complained of in the parts and will be referred especially to the region of the frontal sinuses.

This form of disease of the nasal passages is met with in all classes of society: in the robust individual no less than in the delicate one; in those who have been tenderly reared, and in those who have been brought up in the roughest manner. It may make its appearance at any age, but seems to be most frequently noticed for the first time about the period of the second dentition. Most of the patients I have seen have been girls from six or eight years of age upwards to confirmed puberty or early adult life.

If, after thorough cleansing with the douche, syringe, or forceps, the parts are carefully examined,—anteriorly by the aid of hook, probe, dilator, or speculum, and posteriorly by the rhinoscopic mirror,—some points of ulceration, superficial or deep-seated, will usually be detected upon the mucous membrane. These ulcerated spots may occupy the free surface of the turbinated bones, or the lower region of the septum and even when ulceration cannot

be discovered in these situations it is often fair to infer that it is likely to exist upon some portions of the turbinated bones altogether out of the field of direct or indirect vision. The nasal mucous membrane will be swollen, often to such a degree as to occlude the passage at one or more points; in some instances the result of sero-fibrinous or fibrinous infiltration into the submucous connective tissue, in others, the result, in addition, of actual hypertrophy of this tissue. In some cases little bags of thickened tissue or exuberant folds project from the walls and are sometimes mistaken for neoplasms. The parts are usually very much congested, though they do not bleed as a rule, except upon rough manipulation; and they are very sensitive to contact with the probe in some instances, and not at all so in others. The mucous membrane of the posterior portion of the septum is often seen by the rhinoscope, pushed off from its sides by submucous infiltration, bulging into the free space of the nasal outlets so as to present much the appearance of turbid morbid growths.

As a matter of course, in this condition, the patient will experience more or less difficulty of nasal respiration; one nostril or the other, in many instances, being impervious to air, nearly all the time. This induces a habit of keeping the teeth slightly apart to facilitate breathing, and favors the formation of chronic pharyngitis; a condition which is often coincident to all the affections under consideration.

If the disease has existed for a number of years—and it is essentially chronic—the ulcerations will have extended beyond the limits of the tissue proper of the mucous membrane, and will have involved the cartilages and the bones, portions of which will sometimes have been destroyed, and have been discharged spontaneously; so that the cartilaginous septum is in many instances found to have been pierced through, sometimes in one or two small perforations, but more frequently in a single large, irregular hole, perhaps admitting the end of the little finger, or the end of a larger one, and looking as if it had been gouged out with some rude tool. In some instances, one or more of the turbinated bones, usually the middle one, will be necrosed and bare in its entire extent, or the greater portion of it, awaiting its extraction,—an operation readily accomplished with polyp-forceps. Sometimes it has been removed spontaneously, or has been pulled out by the patient, leaving a large, free space in the nostril, through which the posterior wall of the pharynx can be seen, or a portion of the upper surface of the velum. In some instances the destructive inflammation will have progressed to a farther extent, and have involved portions of the superior maxillary bone, from which copious accumulations of fetid pus and necrotic particles will have been discharged at intervals. Cases of this kind will have produced some alteration in the external configuration of the parts, the nose being sunk in or flattened out, and the nostrils distended. In some instances the orifices of one or more sinuses will be recognized, the tracks of which cannot be

readily traced, perhaps because they course around the scroll of the turbinated bone. From these openings, on pressure behind them with a probe, a few drops of creamy pus can often be discharged.

Some other evidence of the strumous diathesis is usually apparent.

In cases of undoubted syphilitic origin,—and the distinction between scrofulous and syphilitic coryza is not always well marked,—the involvement of bony structures will progress to a much greater extent than has already been described, the earlier manifestations having been similar to those of catarrhal and scrofulous inflammation, but more active. The turbinated bones, the vomer, the nasal bones, the palate bones, the lacrymal bones, the sphenoid, and the ethmoid, will often undergo more or less destruction. In some instances pharyngeal rhinoscopy and the use of the probe will early reveal necrosis of the vomer, the sphenoid, and the basilar process of the occipital bone. The discharge in these cases is not, as a rule, so offensive in odor as in the scrofulous cases; but it is equally persistent, and will continue as long as any dead bone remains undischarged. The tortuous contour of the nasal passages and the sinuses leading to them is such as to render it impossible in many instances to remove all of this dead bone by surgical interference through the nostrils anteriorly or posteriorly so that its discharge must be awaited bit by bit. The amount of destruction that the parts may undergo under such circumstances is enormous. In some instances the cranial vault has been pierced, and the resulting meningitis has put an end to the complaint and to the patient.

The amount of the discharge, its consistence, and the intensity of its disagreeable odor, will vary during the course of a fetid coryza, whatever may have been its origin. An inflammation of the parts such as follows a cold, a determination of blood to the head, over worked, the approach of the menstrual flux, all seem to increase the offensiveness of the discharge. This will become moderate after cleansing with the douche, and the application of remedies; but will wax just as bad as ever in a few hours, or a few days. When there is an involvement of bone, or a fresh involvement of bone, the fetor will be increased until the necrosed portion has become exfoliated and discharged.

The patient is usually cognizant of his extremely unpleasant condition to a certain extent, but is unaware of the full amount of stench emitted from his body, because the sense of smell is obtunded, and in some instances entirely destroyed. With the loss of smell there is, in consequence, more or less loss of the sense of taste; so much of it as is dependent on the sense of smell. In those cases in which the frontal and maxillary sinuses are effected to a greater extent than the nasal passages, the patient is better able to appreciate his infirmity, for the sense of smell is still conserved to a considerable degree. The offensiveness of the odor in extreme cases is beyond description, and must be felt to be comprehended. It will impregnate a room for hours,

and deter the practitioner from persisting in proper efforts to relieve the local condition.

TREATMENT.

The treatment of a case of fetid coryza will depend upon its nature. When due to the presence of a foreign body, a rhinolith, or a morbid growth, the removal of the exciting cause will cure the discharge. In cases with constitutional taint, systemic treatment is required. The treatment of this condition, in fact, is simpler in principle than in practice; but it is always tedious, and often unsatisfactory. Palliation of the severer symptoms and diminution of the fetor can almost always be effected, but a thorough cure often requires months of persistent treatment; in some instances seeming almost unattainable, and in others, quite so. When the larger bones are diseased, and it is impossible to get access to them, the condition will continue for years; dead bone being exfoliated splinter by splinter, and fresh involvements becoming new sources of evil as older ones are undergoing amelioration.

In scrofulous cases we can endeavor to improve the tone of the constitution by resort to systemic remedies, such as cod-liver oil, quinine, and iron, the preparations of iodine, arsenic, and so on; and we may thus repress increase in the malady, even if we fail in restraining it. The administration of cubeb, preferably, in my own practice, in doses of from fifteen to twenty drops, or more, of the oleoresin on sugar, after meals, will sometimes diminish the copiousness of the secretions to a certain extent, and modify their character by the local influence of the drug in its elimination through the mucous membrane of the nasal tract.

The decidedly syphilitic cases, when not so far advanced as to be irremediable, are much more manageable under systemic medication than are the idiopathic and scrofulous cases. Here small doses of the bichloride of mercury, with the free use of the iodide of potassium, are just as serviceable as in other forms of constitutional syphilis, especially if the general vigor of the patient has not been greatly impaired. If the general health is poor, a generous allowance of nutritious diet, assisted by a tonic course of treatment, will be necessary before beneficial results can be expected from specific remedies.

All forms of fetid coryza require local treatment. The parts should be frequently cleansed, and topical remedies assiduously applied. Without preliminary cleansing, local remedies are of little avail: they become entangled with the secretions to a certain extent, and cannot exert that good effect upon the parts which they exercise when applied upon a clean surface.

As mentioned in connection with cleansing the parts preparatory to examination, we use for this purpose the nasal syringe, applied anteriorly and posteriorly, and the continuous nasal douche; employing the medicinal articles already enumerated. These ablutions are by no means to be neglected, but should be attended to as punctually and as scrupulously as the patient attends to other wants of nature.

The local applications for remedial purposes consist of solutions, powders, vapors, and unguents, brought in contact with the parts by suitable appliances. When ulcerated surfaces can be reached by instruments introduced within the nostrils or behind the palate, they should be regularly touched by the sponge, cotton wad, or hair pencil, loaded with a solution of nitrate of silver, sulphate of copper or of zinc, carbolic acid, chromic, nitric, or muriatic acid, or the acid nitrate of mercury, as the case may seem to demand. Dead bone, where accessible, should be removed by the forceps, assisted, if need be, by the knife or scissors. Too much force should not be exerted in the endeavor to remove dead bone. It is better practice often to use frequent traction from side to side with forceps, in a sort of dislodging motion, so as to loosen the pieces of dead bone, and thus gradually render them sufficiently movable to be extracted without much physical effort. If the bone is too large for removal through the nostril in mass, it may be crushed between the blades of strong forceps, or divided by cutting-pliers, and be extracted piecemeal. In many instances the dead bone may be removed through the mouth by means of curved forceps passed up behind the palate.

The contact of the opposing surfaces of mucous membrane can often be overcome by the daily interposition, for an hour or more at a time, of strips of compressed sponge, or of tubes of laminaria; mechanical appliances which compress the parts as they may imbibe moisture from the secretions, thereby favoring absorption of the products of submucous infiltration. Where hypertrophied or exuberant mucous membrane exists, and where internal compression is insufficient to enlarge the passage for the free ingress and egress of air and the free discharge of the secretions, it is good practice to twist off portions of the membrane with delicate forceps, so that cicatrization of the irregular edges of the wound may enlarge the passage. The free bleeding accompanying this procedure exerts a salutary influence upon the parts; and though the operation is very painful, it is so efficient in its relief that the patient will readily submit to it again and again, for the sake of the ease it affords in respiration afterwards.

The solutions used by douche or injection may contain chlorate of potassa, alum, creasote, or carbolic acid, permanganate of potassa, chloride of lime, or similar substances, which, in addition to their local action on the parts, tend to control fetor. Or we may use special injections or sprays of nitrate of silver, sulphate of zinc and of copper, the sulphocarbolates of zinc or lime, bichloride or iodide of mercury, chloride of zinc, chloride of lime, and the like. These injections should be employed at least twice a day, night and morning, and, where practicable, three and even four times a day; and they should always be preceded by the use of the douche for cleansing-purposes. They should be used in weak dilution at first,—say two or three grains to the ounce,—and be gradually increased in strength as tolerance of them is manifested; care being taken

that none of the solution is swallowed by the patient, on the one hand, and that too free use of remedies which act promptly on the system be not made, on the other; for the nasal mucous membrane readily absorbs certain remedies, and the proximity of the olfactory filaments to the nervous centre favors the systemic effect of others. This latter fact is often utilized to subdue the pain in the frontal region, by the local application of an ointment containing three or four grains of morphia, or one or two of the extract of stramonium, to the ounce; not more than the volume of a pea being used at a time.

A solution of the chloride of lime was used in this city, with great success, by Prof. Horner, who injected each nostril twice a day with a solution containing a teaspoonful of the chloride of lime in a wineglassful of water. This practice is not much in use to-day, but it deserves to be. A somewhat similar formula, from which I have sometimes obtained very satisfactory results, contains from thirty to sixty grains of the chloride of lime to the ounce of the decoction of krameria; of which two or three drachms, or more, diluted with an equal quantity of water, are injected into the nostrils night and morning, immediately after the use of the douche. Sometimes the parts will not bear a solution of this strength, and it must be diluted accordingly. When the remedy excoriates the external tissues, as it will do sometimes, its use must be suspended or its strength reduced, as may seem most judicious. Perhaps a preliminary coating with collodion will prevent this excoriation, but I have never tried it.

Glycerin is sometimes of great service as an injection, particularly in serofulous cases. Being bland and unirritating, its affinity for moisture of all kinds facilitates the separation and removal of the secretions, inspissated crusts, and detached fragments of dead bone. The addition of iodine, in the proportion of a grain or two to the ounce of glycerine, is sometimes advantageous.

Prof. Trousseau relied greatly upon certain medicated powders to be snuffed up by the patient twice or thrice a day, after having cleansed the nostrils as thoroughly as possible. His principal formulæ were calomel, a drachm to the ounce of sugar, and red precipitate, forty grains to the ounce of sugar; their use being regulated in accordance with the irritation produced. Another favorite powder, with which he was very successful, was composed of bismuth rubbed up with equal parts of Venetian tale, and this, on account of its innocuousness, was used as freely as was desired.

Camphor, tannin, cubebs, and other substances, separately or in combination, have been used in a similar manner; some practitioners mixing them with two or three times their bulk of Scotch or Welsh snuff. Various mechanical appliances are in use for the purpose of injecting the powders upon the parts.

Citrine and other ointments, more or less diluted, are sometimes used locally after thorough cleansing; being applied to the parts by the little finger, a hair pencil, or a cotton wad on the end of a wire.

The principal remedies used in the form of vapor are preparations of mercury, evaporated over a spirit-lamp, the fumes from which are drawn by inspiratory effort through the nostrils. The fumes of muriate of ammonia from the heated salt itself, or in a nascent state from commingling of the vapors of muriatic acid and strong aqua ammoniæ, are also used a great deal in the scrofulous cases, both for local and constitutional effects.

With all these resources at command, we are able to improve the condition of patients affected with fetid coryza, and place them under the most favorable conditions for the cure of whatever affection has given origin to this loathsome catarrh.—*Philadelphia Medical Times*.

CLINICAL LECTURE.

ON SEBORRHOEA CAPITIS.

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Reported by DR. ARTHUR VAN HARLINGEN.

The patient, whose case forms the subject of our study to-day, complains of an affection, not indeed severe, and certainly not dangerous, but yet one of such character as to claim close study of its features and careful treatment, if we would succeed in its cure.

He is, you observe, a man of middle age, pale, and evidently out of health. A weaver by occupation, he is confined much of the time to a dark, unwholesome apartment; his hygienic surroundings in fact, are bad.

The disease for which he seeks relief we find to be localized in the scalp, showing itself on the surface in the form of a copious accumulation of small, pearly-white, greasy-looking scales.

The production of these scales is attended with considerable itching, and is so rapid that, although the scalp may be thoroughly cleansed in the evening, yet by the next morning, they are present again as abundantly as ever.

The duration of the affection is about three months, or rather about that length of time has elapsed since the itching and scaliness first became so annoying as to attract the patient's attention. It is probable that its origin may be referred to much earlier date.

These facts in the history of the case having been ascertained, let us examine the appearances presented, and determine, so far as we may, its exact nature.

Have we any extraneous causes of irritation, such as might produce a condition like the present?

As to stimulant applications, our patient informs us that none have been made: but as to pediculi, the only other likely source of external irritation, some examination will be necessary.

The diagnosis of phtheiriæsis is not difficult, since either the unmistakable pediculus is present in *propria personâ*, or its representative ova, known by the following characteristics, may be discovered.

The ovum of the *P. capitis* is a small, pear-shaped,

grayish-white body, about the size of a grain of sand, and is found attached quite firmly by its smaller end, to the hair, at a considerable distance from its insertion into the skin. Examination of our patient's scalp shows the absence of living pediculi; but are these grayish particles sticking to the hairs, at various points, ova? At first glance, they certainly appear to be such; but on closer inspection they are seen to have an irregular shape, to be easily brushed off from the hair, and in fact, to be in all respects identical with the scales on the surface of the scalp.

Phtheiriæsis, then, the only remaining source of irritation, being excluded, let us proceed to an examination of the eruption itself, with the object of ascertaining which, among several affections likely to be found in this locality, we have in the present case.

There are only three diseases occurring on the scalp in a form resembling the one before us: they are *psoriasis*, *eczema*, and *seborrhœa*. It would be impossible to give such a verbal description of these affections as would enable you always, and under all circumstances, to recognize and distinguish them; experience alone will enable you to do that. Their leading characteristics, however, you should certainly be acquainted with. They are as follows:

Psoriasis capitis manifests itself in the form of dry, white scales, scattered thorough the scalp. It usually extends a little beyond the space covered by long hair, so as frequently to form over the forehead, ears, and neck, a whitish or reddish border encircling the scalp. It is not apt, as a rule, to itch so intensely as the other two affections under consideration, and when occurring in the head is almost invariably found in other parts of the body, especially around the elbow and knee-joints.

Eczema capitis may occur either in the vesicular or squamous form. If it occurs in the former, the peculiar structure of the scalp modifies, to some extent, the appearance of the disease.

In mild cases, this variety presents itself in the form of yellowish, friable crusts, consisting of epithelial scales mingled with dried serum. On raising these crusts, the surface beneath is found to be red, shining, and moist. In severe or neglected cases the secretion of the sebaceous glands mingles with that of the vesicles, and the product of disease, becoming decomposed, give rise to a peculiar and disgusting odor. The hairs, also, become matted together, and the most severe form of the affection is called in some countries "*plica polonica*," a mixture, in fact, of *eczema*, *seborrhœa*, and filth.

In the squamous form of *eczema*, the scalp is red, and covered with fine, dry, white scales.

Seborrhœa capitis is characterized by the abundant production of scales in the same manner as the two diseases just spoken of, but these scales are seen, on careful inspection, to possess quite a different character from those of *psoriasis* or *eczema*. They are numerous, pearly-white, and have a decidedly greasy lustre and feel. They have also a certain cohesiveness, which causes them to accumulate in masses, but they have no tendency to produce matting of the hair.

On raising a patch of seborrhœa, we find the underlying skin red indeed, and somewhat chining but with no appearance of moisture, as with eczema.

A careful examination of the patient before us will justify the assertion that we have here a well-marked case of the last of these three disease,—seborrhœa capitis,—seborrhœa of the head.

There are two varieties of seborrhœa: seborrhœa oleosa and seborrhœa sicca. The former is characterized, as its name would indicate, by increased fluidity of the sebaceous secretion, which is also poured out in such quantity that the affected skin frequently looks as if it had been freshly anointed with oil. This variety is most usually found on the face, although it sometimes occurs on the scalp and elsewhere. When persons who are exposed to dust or dirt become subjects of this variety of the disease, the visage presents a peculiar and constant grimy appearance, which nothing but frequent cleansing can prevent.

In seborrhœa sicca, on the contrary, the more solid constituents of the sebum predominate and the secretion assumes an inspissated condition; hence the name, dry seborrhœa. It is the latter variety of seborrhœa which we have in the case before us.

This affection is not invariably confined to the scalp; on the contrary, we frequently see it on the face, and, in fact, it may occur in any part of the body where there are sebaceous glands. It is decidedly more common, however, in the scalp, since in this locality the sebaceous glands are more numerous and active than elsewhere.

When seborrhœa sicca occurs in non-hairy portions of the body, its appearance is decidedly modified; fewer scales are detached, and the diseased surface usually presents simply a circumscribed patch of congested skin, with slightly roughened cuticle.

The pathology of the affection is as follows; When from any cause the sebaceous glands take on abnormal action, not only is their secretion altered, in one way or another, and poured out in increased quantity, but their epithelial investment itself becomes to a certain degree affected, and the living cells are reproduced and thrown off with unhealthy rapidity. It is the cells constituting this living membrane, as well as the inspissated sebum which mats them together, which go to form the pearly-gray scales observed on the surface of the skin.

The name of the disease—seborrhœa—is derived from the Greek, and signifies a flow of sebum to an abnormal amount, this being the characteristics feature of the affection.

The rapidity with which the scales are thrown off is astonishing. Our patient has just told us that in a short time the scalp may become entirely covered with them. This rapid proliferation of the living epithelium with abnormal and excessive secretion from the sebaceous follicles may go on for years if unchecked, and finally the disease may involve the hairs sheaths themselves, and cause the death of the hair. Seborrhœa becomes, in this way one of the most frequent causes of premature baldness.

The origin of the affection is usually to be found in some defect of nutrition, such as chlorosis or

anæmia in both males and females. In the latter, irregularity in the performance of the menstrual function is a frequent cause. In fine, all those conditions of want of health which are indicated by cold hands and feet, as well as various forms of indigestion, may be indicated as among the known causes of seborrhœa.

Our patient is evidently anæmic, and badly nourished, and our treatment of his skin-trouble will be based upon the removal of this condition. So far as he is able to follow our advice, he will take fresh air and exercise. His food shall be nutritious, with strict avoidance of pastry, fat meats, or any form of diet which may be found to cause indigestion.

As regards medicinal treatment, he will be ordered ol. morrhue; a tablespoonful of the oil to be taken about an hour after ordinary meals. If this does not derange the stomach or digestive apparatus, he will be directed to continue its use for several months, intermitting it for a short period perhaps at intervals. The cod-liver oil is often of decided benefit in these cases, and may be relied upon as a valuable auxiliary. But the medicine, which is of paramount importance and of unquestionable service in the majority of cases of seborrhœa, is iron; it is indicated and will be of service in the case of the patient before us. He will be ordered four grains of the tartrate of iron and potassium in sweetened water, to be taken thrice daily, directly after eating. The use of this preparation will be persevered in for some time; several months at least.

We shall scarcely look for much improvement before a month's time. Seborrhœa is slow to get well; it is a disease which has to be treated with care and discretion, requiring time to undergo change. Until a certain alteration has been produced in the constitution of the patient, it is useless to expect a cessation of the process; for the disease, in the case under consideration, is no mere local trouble, but a state emphatically associated with his general poor health and improper condition. Relying upon the oil and iron for the internal treatment, together with hygienic measures, it will be necessary at the same time to employ local treatment as auxiliary means of relief. It is important to keep the scalp thoroughly clean and free from the products of the disease. To get rid of the scales we shall order him some alkaline liquid preparation. A very suitable wash for these cases is the tinct. sap. viridis,—a solution of *sapo viridis* in alcohol in the proportion of two ounces of soap to one of alcohol. This is a valuable and efficacious alkaline wash for various conditions of the scalp, and is of particular service in seborrhœa capitis. It is to be rubbed upon the head by means of a piece of flannel, adding a sufficient quantity of water to the scalp from time to time, to make an abundant lather. This is thoroughly rubbed into the affected parts, and after ten or fifteen minutes completely washed out of the hair by means of an abundant supply of warm water, care being taken to rid the scalp entirely of suds. The scales will, by this means, be completely removed. The hair and scalp should now be dried with a soft towel until all moisture has disappeared. Some oily or fatty pre-

paration is now to be applied directly to the scalp, and to the hair as well, in order to counteract the effect of the alkaline wash, which tends to produce shrinkage of the skin. We shall order for our patient an oil composed of one part glycerine, one part ol. ricini, and two parts alcohol, to be worked into the scalp after each washing with the soap preparation.

There are cases of seborrhœa, however, where the products of disease have been allowed to accumulate to such an extent that they form quite a crust. In such cases a quantity of olive oil—say a teacupful—should be well worked into the scalp, and the head covered with a night-cap. If this is done at night, the crusts and scales will have become so far softened by the next morning that the wash above mentioned may be successfully used.

Finally, you should remember that in such cases as these of old standing, and where the disease has made much progress, many hairs will have become loosened from their sheaths, and will remain attached to the crusts only. Of course, the first time the patient's head is thoroughly cleansed all these detached hairs come away, and the effect at times is somewhat startling. It should always be ascertained if many hairs have become loosened or entirely separated before the cleansing process has been commenced, that the patient may be warned of the probable result.—*Philadelphia Medical Times*.

SULPHUR IN THE TREATMENT ACNE.

Dr. Sidney Ringer says (*The Lancet*, Feb. 21) : "The topical effects of sulphur ointment, or, of an iodide of the hypochlorite of sulphur, or, still better, of the iodide of sulphur of the Pharmacopœia, is most marked an *acne indurata* and *acne rosacea*, these effects being twofold, and even opposite, according to the stage of the eruption. If applied at the very commencement of the eruption, as soon as the little hard knot is felt under the skin, further development is arrested, and the hardness speedily disappears. For instance, if smeared over the hardness just before going to bed, in the morning scarcely any induration will be felt, though after a time, perhaps, from exercise or the irritation from washing, much of the hardness may return, to be again removed by a new application of the ointment, so that in two or three days a papule that threatened to become of considerable size may be completely dispersed.

When, however, the nodule has advanced further, and suppuration has set in, then the effects of the ointment are much like those of the sulphides, administered internally, on boils, hastening maturation, limiting the swelling and hardness, and thus considerably curtailing the duration of the eruption. Nay, further, if rubbed over the skin, it appears to check the formation of acne spots. If rubbed over the nose and neighboring parts of the face in *acne rosacea* its effects are often most striking. Not only does it act as an *acne indurata*, but the hardened, swollen tissues become softened and reduced to a more natural state. He has found the iodide of

sulphur likewise useful in bromic acne, reducing the eruption, or at least considerably reducing the size of each spot. In acne the ointment should be thinly spread over the eruption, night and morning.

ON SULPHIDE OF POTASSIUM, SULPHIDE OF SODIUM, SULPHIDE OF CALCIUM.

Dr. Sidney Ringer speaks enthusiastically of the influence of these remedies upon the suppurative processes, such as abscesses, boils, and scrofulous sores. When sulphide of calcium or potassium is administered, a thin, watery, unhealthy discharge becomes at first more abundant, afterwards diminishing, and throughout continues thicker and healthier, possessing, indeed, the characters of "laudable" pus. The condition of the sore improves correspondingly and its healing is promoted. The sulphides appear, often, to arrest suppuration, serving to reduce inflammation, and avert the formation of pus.

The effects of these remedies are equally conspicuous in mammary abscesses, although in rare instances they appear temporarily to increase the pain—a remark which seems, sometimes, to hold good with respects to boils. But, as a rule, the pain is speedily mitigated. Singular to say, he has found these remedies of much less use in forwarding the maturation and expulsion of pus in indolent tumors. For the relief of boils and carbuncles, the tenth of a grain of sulphide of calcium, given every two hours, generally prevents the formation of fresh boils, while it lessens the inflammation and reduces the area of existing boils, and quickly liquefies the "core," so that its separation is much more speedy than usual. In some cases of deep-seated boils and abscesses they are powerless.

A very beneficial effect appears to be exercised upon suppurating scrofulous glands in the neck. Here again they hasten the elimination of the pus, and subsequently the cheesy, scrofulous matter.

DIVISION OF THE SPINAL CHORD IN THE NECK.

Indian Medical Gazette, September 1, 1873.

N. B. Baillie records the case of a woman who lived for six hours after receiving a blow with a hatchet which cut through the third spinous process and the back part of the fourth cervical vertebra, dividing the spinal chord completely, and penetrating into the body of the vertebra in front of the spinal canal.—*Phil. Med. Times*.

INCONTINENCE OF URINE.

Dr. Thomas Kennard, of New York, uses the following ointment in the treatment of this disease:—Sulphate of atropia, ten grains; veratria, ten grains, hog's lard, twelve drachms. By rubbing the perineum three times daily with the ointment, in three cases of paralysis accompanied by incontinence of urine, Dr. Kennard obtained a complete recovery at the end of a few days.

MANIPULATION IN THE TREATMENT OF SPRAINS.

(*New York Medical Journal*, January, 1874).—Dr. William R. Fisher reports the following interesting case:

A young woman fell from the top of a step-ladder and severely sprained her right ankle. The local application of ice and other antiphlogistic treatment enabled her at the end of ten days to make a short journey to her home. This was, however, followed by increased pain, swelling, and inflammation, which were again subdued by rest and cold dressings. During the next three months her foot improved slightly under the use of stimulating liniments; but by another fall she lost what little had been gained since the first accident. Iodine and frictions with camphorated oil reduced the pain and swelling and increased the motion at the ankle-joint, but this articulation remained weak and painful whenever use was attempted, and a point just below the external malleolus was exquisitely sensitive to pressure or upon motion. Five months after the original accident she entered an hospital; absolute rest in bed was enforced for two months, but when she got up her foot and ankle proved to be as useless as before, and her general health was decidedly impaired.

Galvanization, repeated blisters, and uniform pressure with wet sponges, as well as quinine, iron, and similar remedies, were all unproductive of any permanent good; and finally it was resolved to submit her to the treatment by manipulation. At this time she could walk a little upon crutches, using her left foot alone to receive her weight; there was an œdematous puffiness about the right ankle almost obliterating the malleoli; the foot had a bluish, dusky hue throughout, arising from a want of active circulation; the temperature of the right leg and foot was lower than that of the left. Pressure over the instep caused a soreness, along the skin below the external malleolus a sharp, darting pain. Passive movement at the ankle in the direction of flexion or extension, and especially lateral motion inward, excited the same sharp pain. Voluntary movement was confined to the toes, and even there, required considerable effort for its performance.

The repeated attacks of acute inflammation in this case had probably been the cause of its long duration, and had resulted in the formation of an unusually large amount of plastic exudation and fibrinous adhesions. The indications all pointed to the sluggish circulation in the ankle and foot as the chief obstacle to improvement.

Treatment was commenced by a general kneading and shampooing of the limbs and body until the patient had become used to the process, but after a few days the manipulations were performed as follows: The whole limb from the knee down was first rubbed and kneaded for twenty minutes lightly where the parts were tender, forcibly where the pressure was well borne. The skin was sponged with water and dried with a towel whenever the epidermis became dry and heated by the friction. The toes were passively exercised in various directions, and the ankle-joint was flexed and extended; the extent of move-

ment being governed by the amount of pain it produced. These manœuvres occupied about five minutes, and were followed by the kneading and frictions a little more forcibly administered, which in turn gave way to the passive movements until the whole had continued for an hour and twenty minutes. At its termination there was a decided increase of motion and diminution of pain. This was repeated daily, the movements of the joint being gradually increased in force and length of the application, while the kneading and frictions were lessened.

On the seventh day of treatment, passive motion of the joints was in every direction and entirely painless; the adhesions had all given way as the force of the manipulations had been increased, snapping audibly one after the other; the foot was warm, there was no puffiness, and she was able to wear the same-sized shoe on the right as on the left foot. After twenty-one days of treatment, she gave up crutches altogether, and four days later she went to the seashore. Since then her progress has been steady, and she is practically cured.

Dr. Fisher believes that of all the means which are recommended for the treatment of sprains, manipulation is the simplest, the easiest in application, and the most efficacious. Quoting from M. Bizet, he says, "The cure by manipulation is the more prompt and certain in proportion as the remedy follows upon the accident, and it may be wrought both in simple and in complicated sprains, except in the case of fracture of the articular extremities."

EXPECTORANT MIXTURE.

The *Medical Record* states that an expectorant mixture much used in the New York Charity Hospital in cases of chronic bronchitis, and with very good results, is the following:—

Anmon. muriat.	
Liq. morph. sulph. (Mag.) aa	3 i.
Syr. tolu.	
Syr. scillæ co., aa	3 i M.
S. 3 i. ter in die.	

LINIMENT FOR ACUTE ARTICULAR RHEUMATISM.

The following is used in the same institution, as an application for the joints in this form of rheumatism:—

Tr. opii	3 i.
Spts. chloroform	3 iss.
Lin. saponis, ad.	Oi. M.

This liniment is applied freely over the joints, and immediately covered with cotton and oil-silk. The relief from pain afforded by this application has been very gratifying to all the rheumatic patients. The general treatment is alkaline.

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EDITOR:

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MONTREAL, MAY, 1874.

MONTREAL GENERAL HOSPITAL.

At the annual meeting of the Governors of this excellent Charity, held on Thursday, the 22nd of May, the resignations of Dr. Scott, who has served the institution for some twenty-seven years, and of Dr. R. Palmer Howard, who has served about twenty-four years, in the capacity of attending physicians were received, accepted, and a cordial vote passed, conveying to them the thanks of the Governors for the faithful and zealous manner in which they had performed their duties. Although it is now becoming an established usage, that appointments to Hospitals should not be tenaciously held for a life time, yet we are sure that not a few who read the *Record*, will hear of the resignation of both these gentlemen with something like a pang of regret. For a quarter of a century they have faithfully and earnestly performed a noble work, many hundreds of medical students having, during that time, received instruction from them in the wards of the hospital. More especially will Dr. Howard be missed by the large number of students who each winter seek Montreal to benefit by the practice this hospital affords. His term of attendance was at this period, and the large class which invariably followed him around the wards, was the natural result of his ability as a clinical teacher. For this particular department he was pre-eminently fitted—rapid in diagnosis and able to impart in a fluent and ready manner, every point of interest and importance. To be gifted in this manner, is not a talent bestowed upon many. In the interest, therefore, of the profession, we feel that it is cause for regret, that Dr. Howard, when compelled by the pressure of practice to re-arrange his duties, was not transferred by the school, with which he is connected, to that department of medical teaching, which is admittedly difficult to fill, and for which he has shown most wonderful adaptedness. Clinical chairs in Montreal have, certainly of late years, been regarded as junior chairs. This we have always considered a great mistake, and if Montreal intends to remain the chief centre of medical educa-

tion for the Dominion, in this, as in some other matters, there must needs be some alteration.

TO OUR SUBSCRIBERS.

As the volume is drawing to a close, our subscribers will confer a favor by remitting *at once* the amount of their subscription.

WESTERN HOSPITAL OF MONTREAL.

This new hospital has organized under its act of incorporation, and has elected the following officers for the year 1874-5. Major Hiram Mills, president; William Workman, Esq., first vice-president; Hugh McLennan, Esq., second vice-president; Henry Judah, Esq., treasurer; Geo. Wilkins, M.D., secretary. A committee was named to look out for a site for the erection of the necessary buildings, and have entered upon their work. At the first annual meeting about thirty-five new life governors were elected, making the life governors of the institution at present seventy-two.

MONTREAL DISPENSARY.

The report of this institution, which was read at its annual meeting the commencement of May, shows a most satisfactory condition. Over six thousand patients received medical aid during the year. The financial condition is also most satisfactory. After placing \$500 to the credit of a building fund, a balance of \$150 is carried forward.

HOW TO CHECK COUGHS.

Dr. Brown-Sequard, in his late Boston Lectures, says that there are many facts which show that morbid phenomena of respiration can always be stopped by the influence of arrest. Coughing, for instance, can be stopped by pressing on the nerves of the lip in the neighborhood of the nose. A pressure there may prevent a cough when it is beginning. Sneezing may be stopped by the same mechanism. Pressing in the neighborhood of the ear, right in front of the ear, may stop coughing. It is also preventive of hiccough, but much less so than of sneezing or coughing. Pressing very hard on the top of the mouth inside is also a means of stopping coughing. And, he adds, that the will has immense powder there. There was a French nurse who used to say, "The first patient who coughs here will be deprived of his food to-day." It was exceedingly rare that a patient coughed then.

PERSONAL.

Dr. Cameron (McGill College 1874) has been appointed Assistant House Surgeon, Montreal General Hospital.

Dr. Cline (McGill College 1874) has been appointed House Apothecary to the Montreal General Hospital.

Dr. Robert Costigan (Bishop's College 1874) has commenced practice at 49 Russell avenue, Indianapolis, Indiana, U. S.

Dr. Valmore, St. Germain (Bishop's College 1874) has commenced practice at Minneapolis, Minnesota.

Dr. Fuller has resigned the position of Demonstrator of Anatomy to McGill College.

Dr. W. M. Hunter (Bishop's College 1874) has located himself in Cornwall, Ont.

Dr. W. E. Coquillet, formerly a student of Bishop's College, lately of Rush Medical College, Chicago, has commenced practice in Franklinville, Illinois.

Dr. Francis J. Shephard (McGill College) has obtained his diploma of the Royal College of Surgeons of England.

Sir William Moore is the new Director General of the Army Medical Department. He served with the 33rd Regiment, as Surgeon, throughout the Crimean campaign, being present with it at the battles of Alma, Inkerman, and Sebastopol. He passed through the Indian mutiny, and in 1860 was appointed principal medical officer to the expedition to China, under Sir Hope Grant. In 1862 he came to Canada, as Inspector General of Hospitals, and was in charge of the medical arrangements during the Fenian raid of 1866. Soon after he returned to England, and was appointed to a high position in India. He has now reached the highest point, it is possible for him to attain, and we are sure many in Canada, who remember his kindly disposition, and urbanity of manner, will rejoice at his success. We will be much mistaken if, under his direction, many of the abuses which press heavily on the medical department of the army are not removed.

Dr. W. E. Scott and Dr. R. P. Howard, have resigned their positions as attending physicians to the Montreal General Hospital. The former has occupied it for about twenty-seven years, and the latter for about twenty-four years. They have been elected Consulting Physicians and Surgeons to the Institution.

Dr. Roddick, formerly House Surgeon of the Institution, and Dr. Robert Godfrey, professor of Surgery, University of Bishop's College, have been elected by the Governor's Attending Physicians and Surgeons to the Montreal General Hospital, to fill

the vacancies caused by Dr. Scott's and Dr. Howard's resignations.

Dr. Thos. G. Roddick has, we are informed, been appointed Demonstrator of Anatomy to McGill College, in place of Dr. Fuller resigned.

Dr. F. J. Austin, of Sherbrooke, passed through Montreal, from Colorado, *en route* for home on the 22nd May. We are glad to know that his health has been much restored by his winters rest. We understand Dr. Austin has in contemplation, commencing practice in Montreal—his health not permitting his continuing country practice.

Dr. Fenwick of Montreal has so far recovered from his recent severe and prolonged illness, as to permit his travelling. He has been absent from Montreal several weeks.

PROSECUTION BY THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

The end of April this body entered an action against a "Dr. Charles Worms" for practicing in Montreal without a license. The case was tried before the police magistrate, and the defendant was fined \$20 and costs. We are glad to note the activity on the part of the College. In Montreal, we are glad to say, we have but few unlicensed practitioners, but we hear from many of our friends that in country districts they abound to a great extent. We trust that the College will give its attention to them

BIRTHS.

In Montreal on the 11th of May, at 37 Beaver Hall Terrace, the wife of Dr. A. Proudfoot of a daughter.
In Danville, April 13th, the wife of G. A. MacCallum, M.D., of a son.

MARRIAGES.

In Montreal, on the 28th April, by the Rev. Mr. Aoustin, Dr. Joseph Octave Cotu, of Biddeford, Maine, to Mathilde Roy, of Montreal.

In Montreal, on the 21st April, Joseph Edouard Rose, C. M., M. D., of St. Philomene, to Maria Josephine Ema, daughter of Ferdinand Perria Esq., Montreal.

DIED.

At Shelborne, Nova Scotia on the 16th April, Roderic Sutherland, M.D., late House Surgeon, City Hospital, Halifax, in the twenty-seventh year of his age.

At Barton, Ont., on the 19th inst., Ruth Case, relict of the late Dr. Wm. Case, and mother of Dr. Case, sen. of Hamilton, aged 94 years, 8 months and 19 days.

In Toronto on the 26th April, Frederick William, infant son of J. Fulton, M. D.

In Toronto on the 26th ult., Margaret Fisher, aged 4 months, infant daughter of H. E. Buchan, M. D.

In Buenos Ayres, South America, on the 21st of January, Frederick William, aged 3 months and on the 21st of February, Carlos Guillermo, aged 17 months, sons of Dr. William H. Covernton.

Original Communications.

Two Years and a Half in a London General Hospital. By G. F. SLACK, B.A., C.M., M.D., M.R.C.S., Eng. Late House Surgeon Charing Cross Hospital, London.

Any of the London hospitals afford a student ample opportunities of studying cases of fracture, dislocation, &c., and especially one situated like Charing Cross, on the leading, although very narrow highway from the city to the west end. The traffic on this street, the Strand, is very great, and although the London bus drivers, cabmen and coachmen are wonders in their way, still, in the course of a year a large number of people are run over, knocked down or thrown from vehicles. Covent Garden market also furnishes a large number of cases as well as the different lines of railway centering at Charing Cross. On great holidays, such as the day set apart for thanksgiving for the recovery of the Prince of Wales, &c., an immense number of accidents occur, owing partly to the narrowness of the streets, partly to the large crowds assembled, but chiefly, I am afraid, to the free use of what is now, by some, called the national beverage of England. I have attended, on one of these occasions, to as many as seventy cases of accident in one day, varying from slight cuts, contusions, etc., to cases of concussion, fracture, and occasionally, cases of suffocation from close crowding. In a considerable proportion of these cases, the head is the seat of injury, and the immediate cause of the injury a pewter pot, which, in skilful hands is a very formidable weapon. The treatment of scalp wounds of any size or extent was almost invariably the following: After cleansing the wound carefully, the edges were brought together with silver wire and the wound then covered with a pad of lint soaked in a solution of carbolic acid. There is an idea in the minds of some men, that the use of wire sutures for scalp wounds increases the danger of erysipelas. I am quite sure that this is not the case; but of this I am also certain, that when erysipelas does occur in any of these cases, the sutures ought to be at once removed, and if the symptoms continue, a free incision down to the bone will give speedy relief.

One of the great advantages of wire sutures is that bleeding, in nearly all cases, will be speedily arrested, providing sufficient care is taken in their application. Another is, that in a healthy person the wound will unite by first intention. Sometimes the bleeding from scalp wounds is very severe in

spite of sutures, pressure, the application of ligature, iron, etc. I have seen two severe cases in which all these means completely failed, and the bleeding was at last arrested by sitting the patients upright in bed, supported by bedrest and pillows and applying ice-bags to the nape and sides of the neck. Such cases, no doubt, are rare, but they will occasionally occur. Whilst speaking about wounds, it is interesting to notice that, in wounds of the scalp and about the body, some dressing or lotion is nearly always applied after the edges have been brought together, while in wounds of the face the usual treatment is to bring the edges carefully together, either with plaster or, what is generally better, fine sutures of wire or silk, and then to leave them exposed to the air. I have seen this followed where extensive incisions had been made through the face, as in operations upon the upper jaw. This practice no doubt arose from the difficulty or inconvenience in applying dressings and bandages. In most cases it is very successful, however, as nearly every medical man who has tried it can testify.

In a considerable number of these cases of injuries to the head, one or more of the bones of the skull were fractured. The following, selected from the number, are interesting:

A girl, aged 12, fell from a second story window, striking head foremost upon the stone pavement. She died immediately. The curious point in this case was, that although the bones of the skull were all broken or separated and the fragments moved freely one upon another, there was not the slightest cut, break, or apparent bruise of the scalp.

A second case was that of an Irishman, about fifty years of age, who, in passing near a scaffolding upon which bricklayers were at work, received a brick full upon his left temple. He was knocked down and for the moment stunned. In a few minutes he recovered sufficiently to be able to walk to the hospital, where, on examination, his skull was found to be fractured and a triangular piece of bone considerably depressed. No bad symptoms occurring to justify interference with the depressed portion of bone, he remained in hospital some weeks, until some small fragments of dead bone came away, after which the wound rapidly healed. For some months after leaving hospital he remained under observation, but the only effects of the injury were slight pain in the head and very obstinate constipation, requiring constantly strong purgative medicines.

A third, and very tedious case, was the following: A contractor, aged thirty, fell from a scaffold to the ground, a distance of about twenty-five feet. He

was picked up insensible and carried to the hospital. He presented all the symptoms of a severe fracture of the base of the skull, and a very unfavorable opinion was given to the man's friends. He remained for several days insensible, breathing stertorously, the bowels acting involuntarily, fluid coming from his ears, etc. From that time he began slowly to regain consciousness, and in a fortnight he was up and about the wards, although for two months his faculties were in a very disturbed state, not recognising his friends or seeming to have any recollection of the past, and behaving altogether in a very silly, childish manner. In four months he was nearly as well as ever, and went back to his business.

One of the most painful cases I ever saw was that of a very tall, powerful brewer's drayman, upon whose head a thirty gallon keg fell a distance of eight feet. His skull was extensively fractured, in spite of which he lived a week, during which time scarcely an hour passed without his being thrown into a very severe convulsion, in one of which he died.

With regard to the treatment of cases of fracture of skull, in most of them very little was done beyond quiet, purging, and such local applications as might be indicated in each case. In regard to cases of depressed fracture, unless symptoms of compression of the brain manifested themselves, it was seldom deemed advisable to interfere with the injured part. I think the operation of trephining is very seldom resorted to in London, and is only looked upon as justifiable in very well marked cases of compression. There is a wide difference of opinion about what constitute the certain symptoms of fracture of the base of the skull. I have seen a good number of such cases, in most of which post-mortems were made, and as far as I can judge there is only one symptom which can be taken as positive, and that is the oozing of cerebro-spinal fluid from one or both ears. Recovery followed this occurrence in only two cases out of a large number.

Fractures of any of the vertebræ do not often occur, and when they do, a fatal result, sooner or later, may nearly always be anticipated, especially when the cervical ones are implicated. I remember two cases of that nature, in both of which post-mortems were made.

A woman, about forty years of age, was brought into the hospital dead. According to her husband's account, she had fallen backward down a flight of stairs, alighting upon her head. She screamed, "Oh, my neck," and died instantly. A post-mortem revealed a fracture of the fourth cervical vertebra.

In the second case, the history was more obscure.

A young woman was taken into the hospital in a paralyzed condition. According to her own account, she had fallen from a table a week previously, and had been unable to move since. She gradually failed, and in a fortnight died. During this fortnight the prominent symptoms were great pain in the neck, high temperature, and very rapid, difficult breathing. A post-mortem revealed a compound fracture of the body of the fifth cervical vertebra. Inflammation had followed, and pus was found between the fragments, and for about two inches along the spinal cord.

Fracture of the clavicle is, perhaps, the most common, and the one of all fractures that yields to treatment the most readily. The old method of treatment, with the figure of eight bandage, has, to a great extent, fallen into disuse, and has, I think, very sensibly been replaced by the following plan. A firm pad about the size of an orange, is placed in the axilla of the affected side. The elbow is then raised by an assistant, and the lower part of the arm, the elbow and forearm (with a pad of wool under the hand) are bandaged firmly to the side. By these means, if carefully applied, the outer fragment is raised and drawn outward, which will generally bring the broken surfaces in apposition. The seat of the fracture is not covered, so that it can be readily examined. In severe cases, two or three days in bed will assist towards a rapid and successful recovery.

One of the rarest of fractures is that of the body of the scapula. A man came into the hospital one day with his right arm bandaged to his side. A man in driving a very high-wheeled cart, had driven against him. The wheel came violently in contact with his right scapula, splitting it in two nearly equal pieces. He went to an hospital near by, and was at once told the nature of his accident, and that the only treatment required was to bandage the arm of the affected side firmly to the body. Not being satisfied, he came on to Charing Cross for a second opinion. There was not the least doubt about the nature of the injury, as he was very thin and the fragments could be easily felt. The parts united rapidly, and the man soon went back to work.

One of the most unpleasant sights to a surgeon is that of an ununited fracture. A wide difference of opinion exists as to the cause of non-union of bone. Syphilis, scrofula, rheumatism, and several other complaints come in for a share of blame in most cases. In the few cases I have had to do with, non-union has been due to one or other of the following causes, mal-apposition of the fragments from careless

ness on the part of the surgeon, or inability owing to the great amount of displacement or, perhaps what is the commonest cause, the inter-position of a portion of muscle between the fragments. Restlessness on the part of the patient, if it extends over any length of time, or wilful movement of the affected limb, are occasionally the causes of non-union. A cabman was admitted with fracture of the middle of the femur. In a few days he became so reconciled to hospital life, that in order that he might make as long a stay as possible, he used at night to put the foot of the sound leg under the broken thigh, and work it about, with a view to preventing, or rather delaying, union. This went on for two months. As he was a very healthy man, it was a matter of surprise that his case progressed so slowly. At last, a firm starch bandage was applied to the limb, and he was sent out on crutches. In about three weeks he was brought in drunk, and, on removing the bandage, it was found that little or no union had taken place. In his tipsy state the man told me, as a great joke, what he had been in the habit of doing to his leg. He paid dearly for it, as, after months of treatment of all sorts, it was deemed advisable to take his leg off.

A somewhat similar attempt was made by an old huckster woman, who had been admitted with a compound fracture of the humerus. After a few weeks, however, a very firm plaster of Paris bandage was applied over gutta-percha splints, so that it was out of her power to interfere with the arm, and she soon showed signs of improvement.

Cases of fractured ribs are very common in any large city, and are generally uninteresting, as the treatment is very simple and the results almost always satisfactory. Of course, where the lung or a blood vessel is injured, serious consequences often follow. An old man was picked up one night on a back street, and brought to the hospital. On examination it was found that four of his ribs were broken. His breathing became more and more difficult, and in twenty-four hours he was dead. A post-mortem revealed a collapsed right lung, and the pleural cavity full of blood.

A powerful young man, in carelessly coupling two railway carriages at Charing Cross station was squeezed between the buffers. He was carried at once to the hospital. As soon as he was comfortably placed in bed he seemed almost free from pain and perfectly sensible. His breathing was rapid, but did not seem very difficult, as he could talk in a low tone without any great effort. The chief point noticeable was the great duskiness of countenance, which

became deeper and deeper until he died, which event took place in eight hours from the time of the accident. He remained quite sensible to the last, and suffered very little. A post-mortem was made the next morning. None of the ribs were broken or displaced, but there was an extensive rupture of the right lung.

The usual treatment for fractures of the femur was with long liston splints applied directly to the limb without any short splint. With a perineal bandage carefully applied and frequently tightened most cases were turned out without shortening. Occasionally cases occurring near the trochanters, or in the lower third were treated with McIntyre's splint, by which means all the muscles of the thigh and leg are relaxed. For fractures between the knee and ankle a back splint, with a foot-piece, was the rule, and if there was much displacement, or the patient proved restless, well padded side splints were strapped on.

(To be continued.)

Progress of Medical Science.

CHRONIC STORE THROAT.

The patient before you, Josephine —, æt. thirty years, complains of sore throat, which has existed for some time, and has become chronic. She has great pain in swallowing, but none at any other time, and little soreness. The tonsils are enlarged and inflamed in a marked degree, as is also the uvula; they are both red and discolored. Her general health is poor. She has some trouble with her liver and kidneys, and complains of neuralgia in the heart and thorough the entire system. There is a great pain in the head. She is also a little dyspeptic. Has no flatulence or eructations. She has cold moist hands and feet, and, as a general rule, where you have cold hands you will find cold feet also, showing a poor circulation of the blood in the extremities.

These symptoms are due to the disorder of the digestion, and are the accompaniments of neuralgia and bad health. Her flesh is soft and flabby, and her sleep is poor, owing, she thinks, to nervousness. I now proceed to touch the throat with nitrate of silver, which may be applied in stick or solution. About an inch or an inch and a quarter of the stick should be taken and fastened in the barrel of a quill, the edges should be rounded off with a wet rag, and the stick kept in a dry place. Care should be taken in applying this agent, as it will act as an irritant if too much be applied. The touch should be light and rapid. Professor Meigs used to speak of the antiphlogistic touch, which is a very good term. The patient should sit upon a chair, with the head thrown back, and in a position where a good light can be obtained. In urgent cases this remedy may be applied once every twelve hours; in

others once every twenty-four hours, or it may be used only every two or even three days. The application is followed by some pain, uneasiness, and trouble. Sometimes we apply leeches behind and below the ramus of the jaw. Twenty-five foreign leeches would be about the proper number in an acute case of tonsillitis. In cases of this kind it used to be the custom to take from twenty to twenty-five ounces of blood from a man's arm; this would sometimes afford relief in a few hours.

A solution of water impregnated with alum and tannic acid, and applied with a sponge mop, or in a spray, many times proves beneficial. I prefer the mop to the spray. In children, where the use of a gargle is out of the question, the application should be made by the physician himself, or by a well instructed nurse. Many a child has been lost from the inflammation extending down the larynx into the lungs, proving fatal to life, and all owing to negligence in this respect. In these cases patients' diet should consist of mostly liquid food, such as milk, of articles containing milk, of soft boiled rice with crumbs of stale bread broken up into it and of aliments of that description. No solid food should be taken. If there is any fever, the ordinary antiphlogistic remedies may be given; the antimonial and saline mixtures may do good. There is great pain in swallowing, and owing to the large amount of mucus deposited, a full anodyne once or twice in the twenty-four hours would prove beneficial in producing resolution. You may tell the patient to bathe the feet in hot water containing a little mustard, she or he, as the case may be, lying extended on the bed with the feet hanging over the edge, and having them immersed in a tub containing the mixture, with a blanket spread over them to confine the steam. The foot bath is very good when properly given. You should keep the feet immersed for half an hour at a time.

The common practice in country houses, of patients sitting in a chair, with feet immersed, for ten or fifteen minutes, amounts to nothing at all. At the same time with the bath a hot lemonade or whiskey punch may be given. Before the bath you may give about ten grains of Dover's powder with a little morphia. This will soothe the parts, promote sleep, and patient will rise in the morning in good condition. I will now order for this woman a prescription which will tend to equalize the circulation, viz:—

R. Quinæ sulph.,	gr. ij
Ferri sulph.,	gr. ss
Morphiæ sulph.,	gr. 1-20. M.
Ft. pil.	

To be given three times in the twenty-four hours

When the patient's skin is clammy, as a rule, you may give quinine and iron, or some preparation of bark and iron, with a little morphia. Sir Astley Cooper has told us that a man exposed on the top of a stage coach during a journey of several days would derive great benefit from a little opium, which almost always would prevent him from taking cold.

I myself have found benefit from this agent in this respect. I frequently, when going on a journey

in the railway cars, take a little morphia to prevent cold. It is much better than the thickest shoes and stockings for this purpose.—*Philadelphia Reporter.*

TEDIOUS LABOUR FROM DEBILITY AND ITS TREATMENT.

Dr. Hugh Miller, of Glasgow, in a paper read before the Obstetrical Section, British Med. Assoc., made some remarks having reference solely to cases in which delay was due to enfeeblement or failure of the natural powers of the organs specially called into action during parturition. The writer held that the element of time should not be considered in the classification of labours, that it was unscientific to do so, and that uncomplicated labours should only be assumed to be unnatural when the pains were no longer active, and the labour non progressive. After considering the powers of expulsion in a healthy woman, the author referred to the forces at work which prevented a high standard of health from being maintained in city life, and said that, in proportion as it was wanting, labour was prolonged in many cases. Labour in cities was thus frequently tedious from constitutional debility, so that, even while it might be regular and its progress certain for a time, the pains either lingered or became arrested through exhaustion taking place before the labour was completed. When symptoms of acute fatigue set in the pains were short and sharp, and they recurred more frequently. The general indications for treatment were to support the strength before labour set in, and during the first stage, and as soon as the pains indicated debility, to deliver with the forceps. The timely application of the forceps was preferred to ergot, because it seemed more reasonable to assist a weakened organ by giving help from without, than by applying a stimulant to an already overworked one. This practice, instead of inducing flooding, helped to prevent it, through preserving the power of the uterus from becoming exhausted; it also prevented inflammatory diseases of the passages, and the death of the fœtus. In his private practice, he found one case in every twenty-six labours show symptoms of debility; and since he had adopted the early application of the forceps, not one of the children so delivered were stillborn.—*Brit. Med. Journal.*

EARLY CLINICS.

That bedside teaching was pursued eighteen centuries ago, although in no very pleasant way for patients, appears from the following lines translated from Martial:

"I'm out of sorts, but Symmachus is here,
His hundred pupils following in the rear;
All feel my pulse with hands as cold as snow,
I had not fever then—I have it now."

—*Mapother's Address, Med. Press and Circular.*

As an example of the "multum in parvo" style, we extract the following from an article in a recent eclectic journal:

"Diagnosis—'jiggers.' Prescription—sulphite of soda. Result—fixed them the first day."

NOTES OF NEW YORK HOSPITAL PRACTICE.

From the New York Medical Record.

CHARITY HOSPITAL.

PNEUMONIA.—The remedies commonly employed in this hospital in the treatment of pneumonia, are quinine, carbonate of ammonia, and the alcoholics; occasionally, if the fever is too brisk, liq. ammon. acetatis is administered. The oil-silk jacket is uniformly adopted. Quinine is administered from the beginning. Alcohol, as a rule, is early resorted to. Carbonate of ammonia comes in before the second stage becomes completely developed, and is continued throughout the remaining portion of the course. Diet includes hospital extras. An effort was made by one of the visiting physicians to withdraw, somewhat at least, from this highly tonic and stimulating plan of treatment. Accordingly, liq. ammon. acetatis and tincture of aconite were recommended as the chief remedies to be employed during the earlier part of the disease; but the experiment proved so disastrous, the rate of mortality increasing so rapidly, that the attempt at reformation was at once abandoned.

The constitutional condition of the patients who find admission to this hospital, doubtless has a controlling influence upon the treatment necessary to be adopted in this class of diseases, if the best results would be obtained.

EXPECTORANT MIXTURE.—An expectorant mixture very commonly used in cases of chronic bronchitis, and with very good results, is the following: Ammon. muriat. ; liq. morph. sulph (Mag.), of each one drachm; syr. tolu ; syr. scillæ co., of each one ounce. Mix. S. one drachm, t.i.d.

NIGHT-SWEATS OF PHTHISIS.—House-Physician Smith remarked that two-grain pills of oxide of zinc t.i.d., has answered a better purpose in his division for controlling this symptom than any remedy that had been employed.

ACUTE ARTICULAR RHEUMATISM.—Dr. Smith also directed my attention to an external application to be used for the joints, during the progress of this affection. The following is the formula: Tinct. opii. one ounce; spts. chloroform, one and a half ounce; lin. saponis, ad., one pint. Mix. This liniment is applied freely over the joints, and immediately covered with cotton and oil-silk. The relief from pain afforded by this application has been very gratifying to all his rheumatic patients. The general treatment is alkaline.

IRRITABLE STOMACHS.—The case to which my attention was directed, was one in which the ordinary irritability of stomach associated with phthisis, required special treatment. The method of treatment, however, is almost uniformly adopted when an irritable condition of the stomach manifests itself in connection with any chronic disease. The remedy is *raw beef*, chopped fine, and seasoned with salt, pepper, and vinegar. The patient is to subsist entirely upon beef prepared in this manner. Dr. Smith remarked that this plan had, in his wards, seldom failed to afford relief to this condition, when associated with any chronic affection.

SILICATE OF SODA IN THE TREATMENT OF FRACTURES.—House-Surgeon Pierce informed me that he had employed the silicate of soda in his division in the treatment of fractures equally as much as he had employed PLASTER-OF-PARIS. The soda splint has furnished very pleasing results, and, when carefully applied, makes a most elegant and serviceable splint. Three bandages are ordinarily used, the limb being coated over with the silicate, after the application of each bandage. It is also well, and perhaps always advisable, to add narrow strips of pasteboard as the bandages are being applied. Extension, in the proper direction, must be maintained until the splint is thoroughly dried.

ACETIC SPRAY IN DIPHThERIA.—Diphtheria, scarlet fever, typhus and typhoid fevers, and small-pox, constitute a group by themselves.

By present arrangement this department falls under charge of the hospital staff, as one of the branches of "Out-door Service." Dr. Partridge, House-Physician, mentioned that, with regard to diphtheria, very satisfactory results had been obtained in the local treatment of the disease by the use of acetic acid, in solutions of varying strength, in the form of spray. The remedy is used by means of the so-called atomizer. It seems to have the power to dissolve the membrane, and in several cases, where well-developed and somewhat advanced croupy symptoms were present, all were relieved, and that quite speedily, by the use of this agent. The administration of alcoholics is governed by the condition of pulse and temperature. The rate of mortality is small.

ITCHING AND PITTING IN SMALL-POX.—To relieve the intense itching which attends this eruption, washing the surface with glycerine and water acts as if by magic.

To prevent pitting, one of the visiting physicians recommended the use of tr. iodine. The remedy should be employed, if possible, before vesicles are formed. It is to be applied once a day. The effect of this remedy has not been sufficiently noted in the Small-Pox Hospital to warrant any conclusion relative to its value in this direction.

It was used, in one case, after the eruption had been vesicular for one or two days, but before it had become pustular; and only a moderate amount of pitting followed. Whether the adoption of an *ectrotic* plan of treatment will not do the patient more harm than can be counterbalanced by the benefit arising from a moderate arrest of pitting, or even a complete prevention of pitting, is, in many cases, thought to be a question worthy of consideration.

To prevent the formation of abscesses, the combined hypophosphites have served a very excellent purpose. One patient had eight abscesses, and another four, at various situations on the body, and as had rapidly healed under the influence of this combination treatment. In several instances, threatened formation of abscess had been dispelled. The influence of this remedy, therefore, was looked upon with favor, for the reason that abscesses, under such circumstances, are not infrequently attended with *grave* results.

BROMIDE OF POTASSIUM IN GONORRHOEA.

Dr. John W. Bligh, (M.D. McGill College,) in the *London Practitioner*, gives the following directions:—As soon as a patient complains of gonorrhœa, the bromide of potassium should be immediately commenced, and continued throughout the duration of the disease. As it is said to increase the acidity of the urine, a condition not at all desirable, some alkaline bicarbonate should be combined with it, to counteract this tendency. The following formula has been found useful:—

R.	Potassæ bicarbonatis	gr. lx.
	Potassi bromidi	gr. xc-cxx.
	Tincturæ hyoseyami	fl. ʒ ss.
	Aquæ camphoræ	fl. ʒ vss.

Mis. fiat mistura.

One-sixth part of this mixture to be taken three times a day, and once during the night, should the patient happen to be awake.

Care should be taken not to administer a dose whilst a meal is in process of digestion in the stomach, as it may, by neutralizing the gastric juice, interfere with the conversion of the food into chyme.

If the disease is in the first stage, an injection of the salt is ordered and recommended to be used as frequently as opportunities allow. The following is the usual form and strength in which I employ it:

R.	Potassi bromidi	gr. cxx.
	Glycerinæ	fl. ʒ ss.
	Aquæ distillatæ	fl. ʒ vss.

Mis. fiat injectio.

One syringeful to be used every four hours.

When the discharge has assumed the form of gleet, a similar injection, associated or not, as may be thought advisable, with some astringent, will be found useful. In addition, I am accustomed to administer, during this latter stage, from fifteen to twenty grain doses, three times a day, combined with fifteen minims of the tincture of the perchloride of iron, and dissolved in some suitable menstrum.

There are certain accessories which should not be neglected in this, any more than in any other plan of treatment. The bowels should be carefully regulated, the proper diet prescribed, and a total abstinence from beer and other stimulants insisted on. Rest should be enjoined, and over-exertion strictly avoided. The testicles should be supported by a suspensory bandage, and the genitals bathed from time to time, especially before retiring to rest. The flow of urine may be increased by the free use of diluents, as linseed tea, barley water, &c.

CURE OF CHRONIC GONORRHOEA, GLEET, AND LEUCORRHOEA, BY ICE.

Gustav Adolph Abrath, M.D., Medical Officer to the Hospital for Foreign Seamen, Sunderland, writes to the *Medical Times and Gazette* on this subject: There is no disease with which the Medical Practitioner has to deal more troublesome in their nature

or more persistently chronic than inveterate gonorrhœa, gleet, and leucorrhœa. Although in the majority of cases they are amenable to treatment, yet instances occasionally occur which baffle our therapeutic efforts, however skilfully selected and perseveringly continued, until at last the unfortunate patients lose confidence in their professional advisers and become a ready prey to charlatans and quacks. Any additional remedies, therefore, which experience, from time to time, may add to those already in use against these affections, will no doubt be received as valuable contributions to our stock of practical knowledge. Acting under this belief, I now venture to introduce to the notice of the Profession the efficacy of ice in chronic gonorrhœa, gleet and leucorrhœa. In my experience it has proved most successful.

He gives several cases, and adds that other cases of a similar nature were also treated by him in this manner, and all successfully. In all cases, nevertheless, the general health of the patient should be carefully inquired into, and the presence of any complication ascertained, and then a suitable general treatment should be combined with the local. The method of applying the icicles should be as follows: The bladder should be evacuated, and the urethra washed out by injection of a little cold water. About six icicles should then be introduced in succession night and morning, each being allowed to melt away. In northern countries icicles might be easily manufactured in the form of ice bougies with a central stem which is not fragile. In more temperate and variable climates ice machines might be employed to produce them.

The treatment of leucorrhœa, blenorrhœa, or fluor albus, is also of primary importance, in consequence of the very stubborn disposition of this affection, which may be caused by either vaginal or uterine catarrh; but, without entering into any pathological disquisition on the subject, I shall content myself with the details of some important cases successfully treated by the application of ice.

Case 1.—Mrs. McN., æt. 36, a native of Scotland. She began to menstruate regularly at the age of 14 years, and has borne six children, the first when 20, the last when thirty years of age. All labors were natural except the last, during which craniotomy was performed. Shortly after she began to suffer from leucorrhœa, and afterwards to menstruate at irregular periods, but six months previous to consulting me menstruation had ceased. She suffered much pain periodically. She had the advice of several eminent practitioners in Edinburgh and Glasgow, and had employed preparations of iron, injections, escharotics, sea-bathing, etc., but with slight benefit. She came to Sunderland to reside in April, 1868, suffering from leucorrhœa, when she consulted me. On an examination by the speculum I observed that both lips and portio vaginalis of the cervix were very eroded by ulceration, which produced an offensive ichorous discharge containing blood. Cold water was first injected into the vagina, and then ice per vaginam applied to the cervix for one hour night and morning, and complete cure was effected in five

weeks. A nutritious diet and aperients were also necessary in this case. In the course of six weeks afterwards she menstruated, and has since been delivered of a stillborn child.

There are several points connected with leucorrhœa which should be attended to by the practitioner—namely, the state of bowels and urinary organs; also where there are tumors, polypi, or dislocation of uterus, etc., which are often the cause of leucorrhœa, and some of which are irremediable as well as malignant diseases. Before the ice is introduced into the vagina up to the surface of the uterus, a gentle stream of cold water should be injected, and any adherent discharges removed with a sponge. At the os uteri we often find an adherent plug of matter, which should be removed, and then the ice applied.

TREATMENT OF OTORRHŒA.

M. Ménière, in the *Journal de Médecine*, translated in *The Practitioner*, says that:—In all cases of otorrhœa great attention must be paid to the constitution, so that scrofula, syphilis, or other constitutional disease should be treated by appropriate general measures. In this lies an essential element of success in all instances. Systematic injections play an important part; they cannot do harm, and they are almost certainly productive of immense advantages. Cleanliness is a capital point in the treatment of otorrhœa, and nothing is better for this purpose than pure warm water injected from an ordinary syringe with moderate force, the nozzle being placed fairly within the meatus. The caoutchouc pears may be used, but the stream they give is less continuous and strong than that from a syringe. In the early stage, and when the otorrhœa is accompanied by sharp pain, the treatment is but little different: A good injection is composed of warm decoction of marsh mallow, in which one or two poppy heads have been boiled; this may also be poured into the affected ear, the patient resting his head on the sound side. A leech or two may also be applied behind the ear, the second being allowed to attach itself to the same point seized by the first. The whole ear may be covered with a poultice of linseed meal on which a little laudanum has been sprinkled. M. Giampietre recommends as a topical application the instillation into the meatus of two or three drops of a liquid containing one-sixth of a grain of aconitia in one ounce of distilled water. M. Ménière rejects the instillation of laudanum, ether, or chloroform. He objects also to the instillation of oil of almonds, and other similar fluid, so commonly employed; he thinks they often serve to aggravate the original evil. Where the pain is very intense he adopts the plan of subcutaneous injections of morphia, etc. Otorrhœa of old standing is more frequently complained of by patients than acute attacks; and in their treatment warm injections are always indicated. The fluid injected may be either pure water or a very weak solution of alum, one to five grains in two ounces. Solutions of sulphate of zinc and acetate of lead may also be used of the same

strength. No other treatment will effect improvement, if injections, which remove pus and the secretions of the meatus, are neglected. A little piece of wool dipped in a weak solution of carbolic acid may be placed in the orifice of the meatus after each injection; a little weak solution of nitrate of silver may be employed in the same way, and may also be injected once a day, the ear having been first thoroughly cleansed by the injection of warm water, and dried by the subsequent introduction of a little warm dry wool. Neither of these topical applications, and especially of carbolized glycerine, is painful or harsh, as they simply cause a tickling sensation in the ear, and the secreting surface is thus modified without harm. M. Ménière frequently uses the following lotion, the ear having been previously injected with water and dried:—

Water, 200 parts.
Glycerine, 100 parts.
Sulphate of zinc, 5 to 6 parts.

Another lotion, which may be used even when there is great vascularity at the bottom of the meatus, and even in cases of perforation of the tympanum, is:—

Acetate of lead, 5 to 15 parts.
Water 300 parts.

In both cases a few drops may be allowed to remain in the ear for eight or ten minutes. By the use of these means it is not to be expected that every case of otorrhœa will be cured, but at all events the disease will be prevented from getting indefinitely worse, and the patient placed under the most favorable conditions for special treatment.

THE STYLOID MUSCLES AND ANESTHETICS.

D. S. W. Copeland gives the following explanation of the irregular and obstructed breathing which so frequently occurs at a certain stage in the administration of anæsthetics, the patient being in the usual sitting or recumbent posture, with the head held back:

The styloid muscles are put on the stretch. The stylo-glossi draw the tongue backwards, the stylo-hyoidei draw the os hyoides upwards and the stylo-pharyngei raise the pharynx and thyroid cartilage upwards, all thus uniting to close the epiglottis. Pulling out the tongue will partially overcome the action of the styloglossi, while the other muscles will maintain their action.

If now the head be tilted forward, the styloid muscles are all relaxed, the tongue falls forward in the mouth, and the larynx falls into its proper place, thus leaving the epiglottis free and the glottis unobstructed, and establishing regular respiration through the natural channel of the nose.—*Boston Medical and Surgical Journal*, Feb. 26, 1874.

SCHEME FOR THE EXAMINATION OF THE URINE.

- I. Observe the color of the urine, its appearance, if clear, snoky, turbid, &c.
- II. Ascertain the specific gravity.
- III. Examine the reaction, whether acid, neutral, or alkaline, by means of litmus or turmeric paper.
- IV. Test the urine for albumen. If albuminous, examine microscopically for—Renal Casts; Pus Corpuscles; Red blood Corpuscles.
- V. Test the urine for sugar.
- VI. If there be no albumen or sugar present, and no deposit, the urine need not be further examined, unless some special indication exist.
- VII. But if any sediment be observed, the urine must be examined microscopically; the following enumeration of the more common deposits will assist the student:
 - Pink or reddish deposit, dissolved on heating test-tube—urate of soda.
 - White crystalline deposit, soluble in acetic acid—phosphates.
 - White amorphous flocculent deposit, rendered ropy by alkalis—pus.
 - Brownish-red crystalline deposit—uric acid.
 - Red amorphous deposit—blood.

PHYSICAL EXAMINATION

The physical examination of the urine is the application of the senses to its investigation without the employment of chemical or microscopical aids. The colour, translucency, odour, and consistence are the only characters which can be ascertained by this simple method of observation.

Colour. Urine is ordinarily of a reddish yellow colour; but it may be as colourless as water, or dark brown black like porter; a smoky tint is absolutely diagnostic of the presence of blood; a brownish green suggests the presence of the colouring matter of the bile. Many drugs, as rhubarb and saffron, give a peculiar colour to the urine.

Translucency. In health, the urine deposits, after remaining at rest for a short time, a slight cloud of mucus, derived from the bladder and urinary passages; but, in all other respects, healthy urine is perfectly clear. On cooling, however, it may sometimes become turbid from the presence of urates, which are distinguished from other deposits by their appearing after the cooling of urine which was perfectly clear when passed. In disease the urine is often turbid when first voided; and pus is the most frequent cause of this condition.

Odour. It is not yet ascertained to what substance the peculiar odour of the urine is due, nor is it of much importance to the clinical student. When the urine loses its natural odour and becomes foetid and ammoniacal, the change is due to the decomposition of urea into carbonate of ammonia, and the formation of sulphur compounds; in cases of cystitis and paraplegia the alteration begins very rapidly after emission. Various drugs, as cubebs, and articles of diet, as asparagus, give a characteristic odour to the urine; turpentine gives the odour of

violets to the secretion; it is stated that in organic disease of the kidney, and in gout, these substances cannot be recognised in the urine by their smell, after they have been given by the mouth; observations, contradictory to this statement, have, however, been recorded.

Consistence. The urine is a limpid fluid, flowing freely from one vessel to another. But in catarrh of the bladder, and in retention of urine, the ammoniacal products of the decomposition of the urea render the pus present thick and viscid, thus causing the secretion to be ropy, and poured with difficulty from one vessel to another.

The froth on normal urine readily disappears; but if the froth be permanent, the presence of albumen, or one of the constituents of the bile, may be suspected.

Before passing to the mechanical and chemical examination of the urine, it may be well to state the apparatus and reagents which are necessary for bedside investigation by the student. They are

Cylindrical Urine Glasses, containing about 6 fluid-ounces.

A Urinometer, the stem of which is graduated from 1000 to 1060.

Blue and Red Litmus, and Turmeric, Paper.

Test Tubes.

A Spirit Lamp, or Bunsen's Gas-burner.

Nitric Acid.

Acetic Acid.

Liquor Potassæ or Liquor Sodæ.

Solution of Sulphate of Copper, 10 grains to the fluid-ounce.

Fehling's Test Solution for Sugar.

Glass Funnel and Filtering Paper.

With this apparatus, the student will be able to perform all the most important reactions described below.

SPECIFIC GRAVITY.

The specific gravity of the urine varies in health between 1015 and 1020; the simplest way of estimating it is by means of the urinometer.

In order to use this instrument, a quantity of the urine to be examined is poured into a cylindrical glass, and care is taken to remove all the froth which may form, either by blotting paper, or by overfilling the vessel. The urinometer must then be introduced, and allowed to float freely in the urine, without touching either the sides or bottom of the vessel. Since the fluid accumulates around the stem of the urinometer from the physical force of attraction, the specific gravity appears to be higher than it really is, when it is read off while the eye is above the surface of the fluid; to obtain a correct reading, therefore, the eye must be lowered to the level of the surface of the fluid, and the number on the stem read off by looking at it through the urine; having noted this, the urinometer should be depressed in the urine, and again allowed to come to rest, when the number may be again read off; this second estimation is made to correct any mistake that may have occurred in the first reading. The specific gravity thus ascertained should be noted down at once.

The knowledge of the specific gravity of a few ounces of urine is a matter of little value. To render the observation in any way serviceable, the whole quantity passed in the 23 hours must be collected and mixed, and the specific gravity of a small amount of this taken. A rough estimation of the solid matters passed may be made from the specific gravity in the following way; the two last figures are multiplied by 2 (in diabetes by 2.33) which gives the amount of solid matters in a 1,000 parts of urine; if, for example, the specific gravity of the urine be 1.020 1,000 grains of urine will contain 2×20 i.e. 40 grains of solids.

Clinical Import. Sugar in the urine is the most common cause of a high specific gravity; if this substance be not present, excess of urea will be the probable cause.

A low specific gravity, below 1.010 occurs after fluid has been ingested in quantity. A low specific gravity is also noticed frequently in chronic Bright's disease, in hysteria, immediately after the paroxysm, in anæmic conditions, and in diuresis from any cause, such as mental emotion, or exposure to cold.

A high specific gravity with a pale colour, and a low specific gravity with a deep tint, are equally signs of disease.

A new urinometer should be carefully tested since those sold by the instrument makers give results, varying as much as 10 or 12 degrees. The urinometers in common use in Hospitals are very rarely correct.

REACTION.

The urine is almost always secreted acid, though it may become alkaline within a very short time of emission. In the majority of cases in which the urine is said to be alkaline, as in paraplegia and cystitis, the alkalinity is really due to decomposition after being passed. If the urine, then, be found to be alkaline, a fresh specimen should be tested immediately after it has been voided. In cases of retention, the urine sometimes becomes alkaline in the bladder; and, in health, can be made alkaline, by the administration of drugs.

The urine is rarely neutral to test paper; so that many observers have denied its occurrence. Occasionally the urine as an equivocal reaction, reddening to reddened litmus paper.

The cause of the acid reaction of the urine is the presence of the acid phosphate of soda; and according to some observers, of free lactic and hippuric acids. Very shortly after emission, the acidity increases, and lasts, in health, for days, free uric acid being often deposited.

Sooner or later however, the alkaline fermentation sets in, and the urine becomes ammoniacal and foetid from the conversion of urea into carbonate of ammonia, and the formation of sulphide of ammonium, while the phosphates and the urate of ammonia are deposited as a white sediment.

Clinical Import. The acidity of the urine is decreased during digestion, and increased by fasting or perspiration. A very acid, high-coloured urine is associated with the "uric acid diathesis."

Alkalinity of the urine is nearly always due to decomposition of the urea into carbonate of ammonia. It is frequently present in some diseases of the spinal cord, and in chronic affections of the bladder and urinary organs, as a few drops of urine, which has undergone the alkyl fermentation, will rapidly produce the same change in perfectly fresh urine.

When the alkalinity is due to ammonia, the brown colour of the turmeric disappears when the paper is exposed for some time to the air, or gently heated; but the change from yellow to brown is permanent, if the alkalinity be owing to either potash, or soda.

EXAMINATION FOR ALBUMEN.

This is the first and most important step in the chemical examination of the urine; the presence or absence of albumen must always be determined before proceeding to test for any other substance, and the search must never be omitted in the examination of any urine.

The best way of testing for albumen, is to fill a test tube about two-thirds full of the urine to be examined, and to heat the upper layer of the fluid over the flame of a lamp, the lower end of the tube being held between the thumb and forefinger of the observer. By employing this method, two strata of fluid are obtained for comparison.

The heat is applied until the upper portion of the urine begins to boil, for although albumen, when in large quantity, coagulates far below boiling, yet the presence of a small quantity gives no precipitate below 212° F. The bottled stratum of fluid should now be carefully compared with the cool layer in the lower part, by holding the test tube against the light; if any cloudiness or opacity be seen, it must not at once be concluded that albumen is present; but a drop or two of dilute nitric acid should be allowed to flow gently down the side into the urine; the cloud is permanent, if due to albumen; but disappears immediately if due to the earthy phosphates. This addition of acid after boiling should never be omitted, since the most practised eye cannot distinguish, by appearance only, between the cloud produced by albumen, and the phosphate of lime.

Cautions. (a.) The addition of the nitric acid not unfrequently carries down some of the coagulated albumen into the unboiled layer of urine, and thus causes the cloud to be less thick than before; such an appearance is never produced by phosphates; when they are the cause of the turbidity, the urine becomes absolutely clear, as before boiling; slight brown coloration only, occurring from the addition of the nitric acid.

(b.) Should the urine be turbid from the presence of urates, it quickly becomes clear on the application of slight heat; and as it is desirable before testing for albumen to have a clear solution, the whole of test tube should be passed two or three times through the flame of the lamp, until the urates are dissolved; the upper stratum of the urine should then be boiled, and compared with the lower, as above.

(c.) If the urine be neutral or alkaline at the time of testing, the albumen will not be precipitated by heat; the acid reaction must therefore be restored

by a few drops of weak acetic acid, and the urine then boiled, and nitric acid added. If alkaline urine be boiled without previous acidulations, a deposit of phosphate of lime is almost sure to occur, which is immediately dissolved on the addition of an acid.

If nitric acid be added, before boiling, to an albuminous urine, the albumen will often not be precipitated on the application of heat. Care must therefore be taken that it is acetic acid which is used in the preparatory acidification of the urine.

(d.) If the urine be permanently turbid, from any cause, and it is desired to know accurately whether albumen be present, the urine must be filtered before boiling; in this way very minute quantities may be discovered.

The method of testing for albumen, proposed by Heller, which consists of pouring nitric acid into a test tube, and allowing the urine to flow down upon the acid, so that the two fluids touch, but do not mix, and observing the layer of coagulated albumen thus produced, is open to many notorious fallacies, and does not detect minute quantities; it cannot, therefore, be recommended.

A rough way of estimating the amount of albumen present in the urine, is to pour some of the urine into a test tube, until it is about half full, and to boil the whole of the urine in the tube, until the albumen is completely coagulated. One or two drops of nitric acid are then added, and the test tube is set aside for 24 hours: at the end of that time, the proportion of the coagulated albumen, which has collected at the bottom of the tube, to the rest of the fluid, is noticed; if the albumen occupy one-third of the height of the fluid, there is said to be one-third of albumen in the urine; or one-sixth, or one-eighth, as may be. If, however, at the end of 24 hours scarcely any albumen has collected at the bottom, there is said to be a trace. If the urates have been deposited, the urine must be filtered before boiling, or a considerable error will creep in, by their increasing the apparent amount of albumen.*

Clinical Import. The presence of albumen in the urine is an important objective sign of disease.

Any state, which produces a mechanical impediment to the return of blood from the kidneys, will be accompanied by albumen to the urine; and the albumen will be persistent so long as the congestion of the kidney continues; the longer the albumen remains in the urine, the greater danger is there, of permanent textural injury to the kidney. In many acute febrile diseases, albumen is frequently present, which, as a rule disappears with the termination of the illness; but, if persistent, it affords evidence of organic disease of the kidney. In a chronic, non-febrile disorder, without obvious impediment to the return of blood from the kidneys to the heart, the discovery of albumen in a clear urine would indicate structural change in the kidney.

The search for renal casts must always follow the

detection of albumen in the urine. The discovery of these structures renders it certain that the albumen, or, least, part of it, is derived from the kidney.

A frequent cause of the presence of albumen is pus, in proportion to its quantity; in the urine of a woman, a small quantity of albumen is frequently due to leucorrhæal discharge, which is composed chiefly of pus. Gleet, in the male, similarly causes albumen to be present in the urine.

The presence of blood in the urine necessitates the presence of albumen as well from the escape of the serum through the divided vessels.

EXAMINATION FOR SUGAR

If the specific gravity rise above 1,030, sugar may be suspected, and should be looked for.

Many methods of testing for sugar have been proposed; but only the most prominent and trustworthy will be mentioned, although it must be confessed that a rapid, and yet trustworthy, test, suited to practitioners, is still a desideratum.

Moore's Test. Equal parts of urine, and liquor potassæ or liquor sodæ, are poured into a test tube, and the upper stratum of this mixture is heated to boiling in the manner described in the section on examination for albumen. The heated portion becomes brown-red, dark-brown, or black, according to the quantity of sugar present. The least alteration of colour may be perceived by comparing the upper and the lower portions of the liquid.

Cautions. (a.) High coloured urines, and urines containing excess of phosphates, darken perceptibly on boiling with caustic alkalies, and, if the urine be albuminous, the colour will be greatly deepened, though no sugar be present. Before, therefore, applying Moore's test to an albuminous urine, the albumen must be removed by filtration after boiling with a drop of two of acetic acid.

(b.) It has been noticed that liquor potassæ which has been kept for a few weeks only in white glass bottles, takes up lead from the glass, and that a black precipitate of sulphide of lead is formed, when the alkali is boiled with certain urines which contain much sulphur. Care must be therefore taken that the liquor potassæ is free from lead.

The value of Moore's test is chiefly negative; if the urine on boiling with liquor potassæ does not perceptibly darken, it may be assumed to be free from a hurtful quantity of sugar; if, however, darkening occur, a further observation must be made with the tests, described below.

The Copper Test depends on the property which grape sugar possesses, of reducing the higher oxide of copper to a suboxide. There are two methods of conducting this reaction, identical in principle, named respectively Trommer's Test, and Fehling's Test.

Trommer's Test. About a drachm of the suspected urine is poured into a test tube, and liquor potassæ, or liquor sodæ added in about half the quantity, a weak solution of sulphate of copper (about 19 grs. to the fluid-ounce) is dropped into the mixture. The precipitate which first forms is redis-

* The plan for estimating the albumen, by the difference in the specific gravity, before and after coagulation, is not yet based upon sufficiently numerous observations, to be trustworthy.

solved on shaking the test tube, and the copper solution should be carefully added, agitating the test tube after each drop has fallen into the mixture, so long as the precipitate is easily redissolved, when the solution will have acquired a beautiful blue or green colour, but should be quite clear, and free from any precipitate; the contents of the test tube must next be heated to boiling, when, if sugar be present, an orange-red precipitate is first thrown down which, after some time, becomes reddish brown. The precipitate consists of the suboxide of copper.

Since uric acid and mucus will also reduce copper when they are boiled with its salts, a similar solution should be set aside in the cold; and if after the lapse of 24 hours, the reddish precipitate has fallen, sugar is undoubtedly present.

Cautions. Much difficulty is often at first experienced in arranging the proper proportion between the copper solution, and the liquor potassæ. If too much copper be added, which is the most common mistake, the potash cannot redissolve the precipitate first formed, which may then be mistaken for a precipitate of suboxide. The best rule to bear in mind is—always to have an excess of potash present, and never to operate except with a clear solution.

Fehling's Test. In consequence of the difficulty of properly adjusting the quantity of alkali and copper in Trommer's test, many practitioners prefer to use a solution in which the copper and alkali are present in the exact proportion necessary. This solution may be prepared in the following way; 65½ grains of crystallized potassio-tartrate of soda are dissolved in about 5 fluid-ounces of a solution of caustic potash, sp. gr. 1.12. Into this alkaline solution is poured a fluid prepared by dissolving 133½ grains of sulphate of copper in 10 fluid-drachms of water. The solution is exceedingly apt to decompose, and must always be preserved in stoppered bottles, and in a cool place. It is very often more convenient not to mix the alkali and copper until the solution is wanted for use. In this case a fluid-drachm of the sulphate of copper solution may be added to half a fluid-ounce of the alkaline solution prepared as above.

About a couple of drachms of the test-solution are poured into an ordinary test-tube, and the fluid boiled over a lamp. If no deposit occur, the solution may be used for analysis; but if a red precipitate be thrown down, the liquid has decomposed, and a fresh supply must be obtained. While the solution is boiling in the test-tube, the urine must be added to it drop by drop, and the effect watched. A few drops of urine which contains a large percentage of sugar will at once give a precipitate of yellow or red suboxide; but if no precipitate occur, the urine should be added to the fluid, drop by drop, any deposit being carefully looked for, until a quantity equal to that of the Fehling's solution employed, has been added. If no precipitate be found after allowing the test-tube to remain at rest for an hour, the urine may be considered free from sugar.

Cautions. (a.) The test solution should never be employed without previous boiling for a few seconds; the tartrate being exceedingly apt to decompose, and

the solution then reduces copper as effectually as would grape sugar.

(b.) The quantity of urine used in the test should never be greater than the quantity of test solution employed.

(c.) After adding the urine in volume equal to the Fehling's solution, the boiling of the mixture must not be continued, as other substances, besides sugar, present in the urine, will reduce copper at a high temperature.

Fermentation Test. A few grains of German yeast are put into a test tube, which must then be filled with urine, and inverted in a shallow dish already containing a little of the urine, or better still, quick-silver, and set aside in a warm place, as a mantel-piece, or a hob. A similar test tube must be filled with water, a few grains of yeast added, and the whole subjected to the same conditions. If sugar be present, the formation of carbonic acid will, at the end of 24 hours, have driven nearly all the urine out of the test tube; a few bubbles only will have appeared in that containing the water. To prove that this gas is carbonic acid, some caustic potash or soda must be introduced into the test tube, when the gas will be quickly absorbed, and the urine again rise in the tube.

Estimation by loss of density after fermentation. Dr. Roberts has found that after fermentation, "the number of degrees of 'density lost' indicated as many grains of sugar per fluid ounce," and he proposes to estimate by this means the amount of sugar present.

About 4 fluid-ounces of the urine are placed in a 12-ounce bottle with a piece of German yeast of the size of a chessnut. The bottle is then set aside, very lightly covered, in a warm place, such as the mantel piece, or hob, and by its side, a bottle filled with the same urine, but without any yeast, and *tightly corked*. In 24 hours the fermentation is almost finished; the fermented urine is poured into a urine glass, and the specific gravity taken with urinometer; the specific gravity of the unfermented urine is also taken, and the specific gravity of the fermented is subtracted from the specific gravity of the unfermented, the remainder giving the number of grains of sugar contained in a fluid ounce; for example, if the specific gravity of the unfermented be 1.040, and that of the fermented 1.010, the number of grains to sugar in a fluid-ounce will be 30.

The researches of Bruhke have proved that healthy man excretes daily through the kidneys about 15 grains of sugar.

Clinical Import. If the foregoing test announce the presence of sugar, in considerable quantity, whenever the urine is examined, diabetes mellitus may be inferred to exist. But should the presence of sugar in the urine be variable, and its amount small: the fact is not of any known great diagnostic, or therapeutic, importance.

Some writers have asserted that sugar is present in the urine in all cases of impediment to the respiration, and in old persons; this statement, however, must be received with the greatest caution, since it has been contradicted by many excellent observers.

DISAPPEARANCE OF FIBROID TUMOUR UNDER THE ADMINISTRATION OF CHLORIDE OF AMMONIUM.

Dr. F. W. HATCH relates (*Pacific Med. and Surg. Journ.*)

The case of a woman æt. 39, who had a tumour in the abdomen, "extending from the pelvis upwards and to the left side, above the umbilicus," and with neuralgia in the supra-orbital and temporal regions of one side. For the latter affection chloride of ammonium was given to the extent of 60 to 80 grains daily in divided doses. The relief to the neuralgia was very marked and at the same time the abdominal tumour which Dr. H., regarded as a uterine fibroid diminished, and before the end of the year had disappeared.

BROMIDE OF POTASSIUM IN THE TREATMENT OF EPILEPSY.

Dr. THOMAS HAYDEN, in a paper on this subject, read before the Med. Soc. College of Phys. (Ireland,) related three cases of epilepsy treated by the above article, and made the following remarks in regard to them:—

"None of these cases would warrant the assertion that a cure of epilepsy had been effected, although in all three the condition of the patient has been greatly ameliorated, and in two of them, after an interval of three and sixth months respectively, there has been no return of the fits, whereas, previously to treatment, they were in one case of monthly, and in the other of fortnightly recurrence. Some examples of alleged permanent cure have been recorded, but in none of them had sufficient time elapsed after the suspension of treatment, to warrant their being so regarded. So much granted, it is, nevertheless, quite-indisputable that bromide of potassium is capable of controlling epilepsy in a marvellous manner, considering the hitherto intractable character of that disease. Though its agency the fits are mitigated in severity, the interval between them is protracted, and the nutrition of the nerve-centres is promoted, as judged by the improvement of memory, and of self-confidence, and the cessation of muscular tremor on the part of the patient.

"Dr. Anstie and Jackson are of opinion that its efficacy is limited to a reduction in the number of the fits, and a mitigation of their severity; with the exception of a single case observed by Dr. Anstie, they have not witnessed an example of cure, in the sense of long absence of well-pronounced fits, without the continued use of the medicine at short intervals.

"This is likewise my experience; but surely, even if no more can be claimed for the bromide than this, it will not be argued that in the treatment of so formidable a disease as epilepsy, the inconvenience arising from the occasional use of a medical agent by which it can be controlled, and, with more or less of certainty, averted, is a penalty in excess of the advantage gained."

Dr. H. rarely exceeds 30 grs. thrice daily for the dose of bromide, as he thinks that the full effect of the remedy may be obtained without exceeding that quantity.—*Dublin Journ. Med. Sci.*, Feb., 1874.

USE OF SWEET-OIL AS A DRESSING FOR WOUNDS.

Dr. Jos. W. Howe has recently introduced at Trinity hospital, New-York, ordinary sweet-oil for the treatment of all kinds of wounds. It has several advantages over any of the other dressings in use, and apparently yields better results. The advantages are, that it keeps the air from the wound, and at the same time is a grateful dressing to the patient. It also promotes healthy granulations.

The mode of application varies with the variety of wounds for which it was intended.

In necrosis, after the sequestrum is removed, the cavity is filled with the oil, and a lint tent introduced. Every day the oil is renewed. In one case of necrosis of the lower jaw this procedure was had recourse to, and, shortly after, the patient was attacked with facial erysipelas, but, strange to say, the side of the face which had been operated on was not affected.

In incised wounds, the edges are brought together, and lint soaked in oil used as an external dressing.

CHANCROIDS.

Iodoform is used as a dressing for chancroids in the proportion of one part glycerine and one of iodoform. This is applied to the ulcer twice in twenty-four hours, and appears to be more satisfactory than the usual applications.

PAINLESS METHOD OF CAUTERISING WITH NITRIC ACID.

It is found that chancroids can be cauterized with nitric acid without causing severe pain, by first applying to the sore pure carbolic acid. The carbolic acid serves as a local anæsthetic, and prevents the nitric acid from causing pain which is not easily borne by the patient.—*New-York Medical Journal*.

A story is related of a Chicago physician, who is also an extensive real estate operator, that recently he prescribed some pills for a lady, at a time when he was very much absorbed in one of his land transactions. She asked how they were to be taken: "A quarter down," said the doctor, "and the balance in one, two, and three years."

ARTIFICIAL REST IN PLEURISY

Dr. Roberts says, in the *Practitioner*:—In the early stage of the disease I would strongly recommend that a trial should be given to the plan of *mechanically fixing the entire side* by one of the methods to be now described. In order to be of any use it should be done effectually, so as to restrain the movements as much as possible, and the sooner the application is made, the more likely is it to be of service. The plan I originally adopted was the following:—Strips of adhesive plaster, from four to five inches wide, were fixed at one end, close to the spine, and then drawn tightly round the side, as far as the middle line in front, the patient being directed to expire deeply. In this manner the whole side was included, commencing from below and proceeding

upward, each succeeding strip partially overlapping the one below. One was also fixed over the shoulder. Over this layer of plaster strips of bandage of the same width were fixed in like manner, having been previously dipped in a mixture of mucilage and chalk, such as is used in the treatment of fractures. Two or three layers of these were laid on, and then heated sand-bags applied, in order to dry the application as soon as possible. This is a most effectual mode of fixing one side of the chest, while it leaves the other quite free to act; and I would, by the way, commend it to those who are called upon to treat fractured ribs. The plaster adheres firmly to the skin, and the bandages adhere to the plaster, a firm casing being formed which will remain on any length of time. With regard to pleurisy, however, I have since then adopted another plan, which, so far as the disease is concerned, seems sufficiently efficacious. It is merely to use strips of plaster, putting on two or three layers in the following manner:—The first strip is laid on obliquely *in the direction of the ribs*, the second *across the course of the ribs*, the third in the direction of the first, about half overlapping it, the fourth the same as the second, and so on until the entire side is covered. A strip is also passed over the shoulder, which is kept down by another fixed round the side across its ends. Now it is difficult positively to prove that this treatment actually checks the course of pleurisy: but taking a common-sense view of the matter, it is not improbable that such a result is anticipated; and, from my own experience, I have not the slightest doubt but that it is brought about. I have carried it out now in a good number of cases, and in all the course and termination have been most satisfactory, while relief to the pain and other distressing symptoms has been generally immediate. I feel convinced, also, that in any of those cases of extensive pleuritic effusion which come under observation, the accumulation might have been prevented or moderated had his plan of treatment been adopted at an early period.

TREATMENT OF CEREBRO-SPINAL MENINGITIS.

The advice on this subject given by Dr. Dowse, in the *London Medical Times and Gazette*, is as follows:—

1. It has to be considered how to relieve the vessels of the cord, and to equalize the action of the vaso-motor system of nerves. Nothing appears to be of greater service in effecting this than the ergot of rye and belladonna. The former he has prescribed in decided doses, such as half a drachm of the powder every four hours; and the latter he has applied to the spine in the form of a belladonna paste, made by mixing the extract with one-third its weight of glycerine.

2. To check the reflex vomiting, small pieces of ice must be swallowed, not sucked, as the full effect of its sedative influence upon the stomach is then attained.

3. To relieve constipation, Dr. Dowse prefers the administration of a pill of the watery extract of aloes,

for the reason that it acts upon the mucous membrane of the rectum, and dilates the hemorrhoidal veins.

4. To relieve sleeplessness, both chloral and bromide of potassium have proved ineffectual; but what he found of most service was a suppository of eight grains of the extract of henbane, with four of the extract of conium.

5. One essentially practical point must not be forgotten, namely, to keep the paralyzed bladder constantly free from urine. It is not sufficient to draw off the water night and morning, which is the course usually adopted, but a self-retaining catheter must be kept continually in the *viscera*.

6 In reference to diet, it ought to be both nutritive and stimulant from the first.

7. There is a stage in the treatment of this disease, when quinine in large doses becomes of the most signal value—at that crisis when exhaustion appears imminent; the skin covered with sweat; sudamina and bullæ over the body; temperature 102° to 105° ; pulse small, weak, and over 120. But more especially is quinine invaluable when rigors supervene; it never fails to have a good effect. But it must be given in ten or even twenty grain doses; and if the stomach cannot tolerate it, it must be introduced into the system by the rectum.

8. The detraction of blood, either local or general, is not advisable.

CHLORAL HYDRATE AND CAMPHOR AS A LOCAL APPLICATION IN NEURALGIA.

It is stated that the intimate mixture of equal parts of chloral hydrate and camphor, will produce a clear fluid which is of the greatest value as a local application in neuralgia. Mr. Lenox Browne relates (*Brit. Med. Journ.*, March 7, 1874) that he has employed it, and induced professional friends to do so, and that in every case it afforded great, and in some instantaneous, relief. "Its success does not appear," he says, "to be at all dependent on the nerve affected, it being equally efficacious in neuralgia of the sciatica as of the trigeminus. I have found it of the greatest service in neuralgia of the larynx, and in relieving spasmodic cough of a nervous or hysterical character. It is only necessary to paint the mixture lightly over the painful part, and to allow it to dry. It never blisters, though it may occasion a tingling sensation of the skin. Has found it also an excellent application for toothache.—*Medical News*."

ON THE VALUE OF GUARANA IN VARIOUS FORMS OF CHRONIC RHEUMATISM.

BY EDWARD A. RAWSON, M. B., M. CH., &c.,
ASSISTANT SURGEON TO THE CARLOW INFIRMARY.

SUFFERING severely from lumbago, and finding all vaunted remedies fail, I tried guarana as an experiment. I took 15 grs. blended with hot water, and added cream and sugar. For twenty-four hours afterwards I had a delightful relief from pain.

I thought it must be a coincidence ; but, on a return of the lumbago, took another dose in the same manner and with a similar result. I gradually increased the dose to 40 grs., and took it regularly, once a day, for about a week. The lumbago disappeared. I gave up the guarana, and in a few days the pain in the back returned. A 40 gr. dose removed it, and it did not return for several days afterwards. Now, whenever it does, I have my remedy at hand. During the last month I have experimented largely with guarana on a variety of patients, rich and poor. The results vary. When the pain is acute, coming on with sharp stings, guarana acts like magic ; when it is of a dull, aching character, the drug is slower in its action, and several doses must be taken before any decided benefit can be perceived.

I have come to the following conclusion, viz., that whenever the fibrous envelopes of nerves, the aponeurotic sheath of muscles, the fasciæ or tendons are the parts affected, guarana gives, if not instantaneous, at least very immediate relief, which will last from twelve to twenty-four hours ; and I confidently expect that perseverance in the use of the drug, gradually increasing the dose up to 40 grs., will entirely remove any of the above mentioned kinds of rheumatism.

Of the good effects of guarana on nervous hemiplegia there is no doubt, and I trust it will prove, in other hands, as valuable against rheumatism as it has in mine.

I find guarana was examined by Martins in 1829, and by Gravelle in 1840. According to them "it stimulates, and at the same time soothes, the gastric system of nerves, and reduces the excited sensibility of the coeliac plexus, thereby diminishing febrile action, strengthening the stomach and intestines, particularly restraining any excessive mucous discharges ; at the same time increasing the action of the heart and arteries, and promoting diaphoresis." *Irish Hospital Gazette*.

ROOSEVELT HOSPITAL.

REPORT OF PRACTICE AND PECULARITIES OF TREATMENT.

(DR. LA GRAVE, HOUSE-SURGEON.)

GONORRHOEA.

INJECTIONS of the silicate of soda have been employed in the treatment of this affection in both acute and chronic stages.

R. Silicate of soda grs. xx.
Aque 3 viii.
M.

The injections were given three times a day. So far as employed, the results obtained were eminently satisfactory. No other treatment was combined with it.

ULCERS.

This class of cases, "old ulcers," are quite uniformly dressed with Labarraque's solution (liq. sodæ chlorinatæ) until the sore becomes surgically clean.

The solution is to be diluted with water, according to circumstances. If then the granulations have a healthy appearance, the ulcer is strapped, and the limb bandaged. If the granulations become flabby and inactive, a dressing of balsam of Peru is applied and over that straps and bandage. Grafting is resorted to in certain cases, when the ulcer is of some size, and, in this manner, a certain proportion are made to heal very rapidly.

BURNS.

For this class of difficulties white-lead paint seems to meet the indications of treatment as satisfactorily as any material which has been employed. This is interesting, from the fact that almost every plan of treatment which has ever been devised has been employed, and the leaning is towards the paint dressing. Mix as for painting, except considerably thicker, and apply with a brush. It is much more *cleanly* than Buck's burn mixture or Carron oil, and that is not an unimportant element in its favor. A very neat and satisfactory dressing for superficial burns consists in coating the surface with mucilage, and then covering it with powdered Lycopodium.

FOR FLATUS.

R. Pulv. camphor,
" capsicum,
" ginger 3a gr. i.
M.

Divide into six pills.

S. One p. r. n.

Said to afford immediate relief.

FRACTURES ON THE NECK OF THE FEMUR.

In fat individuals it may be difficult to differentially diagnose fractures of the neck of the femur, owing to the impossibility of examining the parts thoroughly. If such be the case, place the patient upon his abdomen, and, having etherized him, see how far the injured limb can be lifted in a backward direction up from the bed, for it will soon be arrested against the brim of the acetabulum, if the neck is intact ; but if fractured, the limb can be bent backwards to an abnormal extent. *Philadelphia Med. Times*.

TREATMENT OF POISONING WITH CHLORAL.

Dr. Albert Erlenmeyer discusses the best method of treating patients who, either by inadvertence or idiosyncrasy, have taken too large a dose of chloral. The symptoms of the toxic influence of this substance are—collapse, diminution of the frequency of respiration, which has been observed to be reduced to four in a minute ; injection of the conjunctiva, contraction of the pupil, blueness of the lips, dropping of the lower jaw and retracted tongue, whilst the pulse is in the early stage strong and slow, but subsequently becomes frequent and feeble, and ultimately scarcely perceptible. In more protracted cases, the face becomes pale, there is tendency to fainting and

vomiting, rigors, disturbance of voluntary movements, weakness of the lower limbs, and cramps in the calves of the legs. Erlénmeyer recommends, first, that the chloral should be removed from the stomach by emetics or the stomach-pump, or be much diluted with water, tea, or coffee; secondly, that artificial respiration should be maintained; and thirdly, that some antidote should be given. Erlénmeyer doubts the value of strychnia as recommended by Liebreich, since, although chloral is useful as an antidote to strychnia, it by no means follows that strychnia should be an antidote to chloral; for we find that morphia is an antidote to atropine poisoning, but atropine is not an antidote in poisoning by morphia. He thinks musk might be tried, but is inclined to place most reliance on liquor ammoniac, subcutaneously injected. As a last recourse, transfusion may be adopted.—*The London Practitioner*, April, 1874.

FATTY DEGENERATION OF THE HEART IN WOMEN DYING SUDDENLY AFTER DELIVERY.

Dr. Philipps reports five cases of sudden death in women, soon after delivery, in none of whom had there been the loss of more than a small quantity of blood. Fatty degeneration of the heart was found in each of the cases.—*Schmidt's Jahr.*

INCONTINENCE OF URINE.

Dr. Thomas Kennard, of New York, uses the following ointment in the treatment of this disease: Sulphate of atropia, ten grains; veratria, ten grains; hog's-lard, twelve drachms. By rubbing the perineum three times daily with the ointment, in three cases of paralysis accompanied by incontinence of urine, Dr. Kennard obtained a complete recovery at the end of a few days.—*The Clinic.*

HYPODERMIC SYRINGE AND ABSCESES.

Dr. Squibb calls attention to the liability to the production of abscess by the use of a hypodermic syringe which has been used in septic cases. Abscesses almost indefinite in number, may be produced in this manner, unless the syringe is properly cleansed by submitting the needle to the flame of a spirit-lamp.

TREATMENT OF THREADWORM.

In a recent lecture by Dr. J. Spencer Cobbold it was stated that the difficulty experienced by physicians in relieving patients from oxyuris vermicularis arose from the old and mistaken notion that the parasite resides in the rectum and sigmoid flexure, whereas recent investigations have shown that the entire length of the colon is the territory inhabited by the threadworm, while the cæcum constitutes the parasite's true headquarters. For this reason active saline cathartics should be given to wash out the contents of the colon and cæcum, injections being afterwards given to dislodge such oxyurides as have been driven down to the lower bowel.

ARSENIC IN THE FURUNCULAR DIATHESIS.

M. De Savignac (*L'Abbeille Médicale*) makes use of arsenic in the treatment of the furuncular diathesis in the following way. Internally he prescribes,

R Sodii arseniat., gr. ii;
Aque, f̄ 3 v. M.

Of this mixture a teaspoonful in a little sweetened water is taken twice a day for three weeks. At the end of that time the arsenic is suspended, and for ten days sulphate of sodium is administered daily, in doses of half an ounce to an ounce.

He returns then to the arsenic as before, repeating the course of treatment, if necessary, three or four times. Occasional doses of decoction of dandelion or sarsaparilla are also administered, and the patient is confined to a diet chiefly vegetable.

Externally, poultices and, later, diachylon are used; and if the tubercles occur in groups, and are quite hard, the following emollient application is employed:

R Sulphuris sublimat., 3 ss;
Pulvis camphoræ, 3 ii;
Unguent. aq. rosæ, 3 iss. M.

—*Phil. Med. Times.*

LOCAL APPLICATIONS IN NEURALGIA.

Chloroform.—Dr. Dupuy speaks very highly of this remedy used as follows: A pledget of lint moistened with chloroform is to be applied to the painful locality, and retained in position a longer or shorter time, depending upon the age, sensitiveness, etc., or the patient, and the part operated upon. Usually, half a minute to five minutes is sufficient, and the application may be renewed from one to a dozen times. Dr. D. states that recent and superficial neuralgias yield to one or two applications, and that even in severe sciatica of long standing he has never been obliged to make more than twelve.

Blisters to apophyseal points.—The constant presence of such points in neuralgias, as shown by M. Armaingault, has led to the use of blisters applied in their immediate neighborhood, with very satisfactory results. In cases of facial, intercostal, lumbodorsal, and sciatica neuralgias, even when of the most persistent character and rebellious to other forms of treatment, this plan has been found effectual.—*L'Union Médicale*, Nos. 19 and 20, February, 1874.

TREATMENT OF PITYRIASIS RUBRA.

The Lancet, February 28, 1874.

Dr. Tibury Fox believes that in cases of pityriasis rubra—hyperemia of the skin and exfoliation of the cuticle—the free use of diuretics is called for, especially in cases which come under observation at an early date, before the hyperæmic state of the skin has given rise to secondary alteration, such as

infiltration into the tissues. It is an established rule in renal therapeutics to stimulate the skin to increased action in cases where the kidneys are congested, or in other conditions in which it is desirable that they should be given rest from work. In the case of a hyperæmic state of skin, where this hyperæmia is not removable by local remedies, and where it is extensive, it is likewise desirable to stimulate the kidneys to increased activity, to relieve the skin of its work,—to give it rest.

Dr. Fox uses a diuretic mixture composed of half a drachm each of acetate and bicarbonate of potassium, one drachm of spirit of juniper, and one ounce of infusion of calumba, for each dose three times daily. The skin is soothed by oily inunctions, and perchloride of iron is administered internally to act as an astringent to the weakened cutaneous vessels.

There is a flavor of genuine wit in the following: Some person said to Sterne that apothecaries bore the same relation to octors that attorneys does to barristers. "So they do," said Sterne; "but apothecaries and attorneys are not alike, for the latter do not deal in *scruples*."—*Balt. Physician and Surgeon*, April, 1874.

AT THE UNIVERSITY OF BERNE,

There are, at present, twenty-five lady medical students, among whom are twenty-two of the Russian women, whom the last ukase forced to leave Zurich.—*Lancet*.

FOR A CORN ON THE TOE.

—Take a black snail and roast him well in a white, wet cloth; bruise him and lay him hot to the Corn, and it will take it away in a very short time.—*Culpeper*, 1656.

EMETICS BY SUBCUTANEOUS INJECTION.

—The only therapeutic agents as yet known which are capable of being used as emetics by subcutaneous injection are *emetin* and *apomorphia*. The dose of the former is one-thirtieth of a grain, given in acidulated water. Apomorphia, which is morphia less an atom of water, is a speedy, safe and pleasant emetic, never acting as a local irritant. The dose (hypodermically) is from .046 to .169 of a grain.

POISONING BY CHLORAL.

—Dr. J. M. Winn reports a case of poisoning by this drug, the patient being a young woman who was in the habit of using a syrup of chloral, without medical advice. On the occasion in question, she took seven teaspoonsful, equal to seventy grains, to relieve a headache. The syrup was purchased of a druggist who sold it as a domestic remedy. Dr. Winn deplors the impunity with which apothecaries sell such drugs.—*Lancet*.

OF THE FACE AND ITS INFIRMITIES.

—1. *The Cause*. It is palpable, that the cause of redness, and breaking out of the Face, is a venous matter, or filthy vapour ascending from the stomach towards the Head, where, meeting with a Rheum or Flegm, thence descending, mixeth with it, and breaketh out in the Face. Therefore let the first intention of cure be to cleanse the stomach.

2. *Caution Negative*.—Let such as are troubled with red Face, abstain from salt Meats, salt Fish and Herrings, drinking of strong Beer, strong Waters or Wine, Garlick, Onions and Mustard, yea, if it be a Welch Man, or Woman, he must abstain from toasted Cheese, and Leeks, and that is a Hell upon Earth to them.—*Culpeper*, 1656.

ICED-WATER ENEMATA IN DYSENTERY.

—Dr. B. Wenzel has related in the *Berliner Klinische Wochenschrift* a series of successful cases of dysentery treated by enemata of iced water. They arrested both hæmorrhage and tenesmus, and reduced pyrexia; and, after one trial, a patient would call for another enema as soon as the pain recurred. Only rarely was opium given, the treatment being confined to iced water alone. In acute cases, he cured. In old chronic cases, the benefit was temporary, as in all other modes of treatment. Whilts, therefore, this plan gives relief in chronic cases, Dr. Wenzel concludes that in acute or recent cases it is the most effective at our disposal.—*The Doctor*.

LATOUR AND OLLIVIER ON MORBID SWEATING OF THE FEET AND ITS TREATMENT.

—Dr. Debrousse Latour has lately published a thesis on local sweatings, in which the unpublished observations of M. Ollivier are incorporated. (*London Medical Record*, March 18, 1874.)

The forms of local sweating which offer the greatest number of interesting points are, according to Hebra, those which affect the armpits, the genital organs, the palm of the hand, and the sole of the foot. Regarding the latter, an elevation of temperature for the time being brings about a really insupportable condition of disordered function. The causes of this morbid perspiration are little known: it is not an attribute of lymphatic temperament, nor always of a want of cleanliness; it is not contagious or hereditary.

There is a conviction among the French medical profession, which the author also holds, that it is dangerous to suppress habitual sweating of the feet. "Perhaps, however," remarks Latour, "we must draw a distinction between patients having a good constitution and those predisposed to pulmonary phthisis or phlegmasiæ of the respiratory organs."

The hygienic treatment of this morbid state in delicate patients, consists in avoiding sudden cooling of the feet. The patient should wear stout shoes or boots and woolen stockings, which should be changed frequently. If, in consequence of a chill, sudden

suppression of perspiration be followed by any unpleasant consequences, the sudorific hypersecretion should be brought on again by the use of very hot foot-baths, and afterwards by wearing woolen socks covered with oiled silk, or even stockings sprinkled with chlorhydrate of ammonia mixed with quicklime, in the proportion of two parts of the latter to one of the former. As a means of diminishing the disagreeableness of excessive and foetid perspiration, the following disinfectants may be used with advantage; the solution of permanganate of potash (0.05 centigrammes to 250 grammes of water), or the solution of tincture of coal tar (1 gramme to 250 grammes of water). If the epidermis becomes softened by maceration, if it falls off, leaving the *reté Malpighii* exposed, and thus renders walking painful and difficult, Hebra recommends that the soles of the feet and the toes should be coated with a mixture of equal parts of compound diachylon plaster and linseed oil, which should be melted before it is used; the excoriated portions should afterwards be covered with linen. If the constitution of the patient warrants more active treatment, lighter boots and thread stockings should be ordered, together with lycopodium, charcoal, and tannin powders.

M. Gaffard recommends allowing some drops of the following liquid to penetrate between the toes:—

Red oxide of lead. 1 gramme.
Solution of subacetate of lead. 29 grammes.

M. Ollivier succeeded with Barèges water and cold douches. Lotions with aromatic vinegar will also be found useful. Another means consists in spreading frequently on the secreting parts clay softened in water and passed through a sieve. As to medicines given and praised as specifics, MM. Ollivier and Latour are convinced that they are powerless against perspiration of the feet and other local sweatings.

FORMULA FOR TAPE-WORM.

—The following mixture is recommended, in *The Druggist's Circular*, as perfectly safe and capable of expelling a tape-worm, alive and entire, *within two hours*:—

Take bark of pomegranate root,	$\frac{1}{2}$ ounce.
pumpkin seed,	$\frac{1}{2}$ drachm.
powdered ergot,	$\frac{1}{2}$ drachm.
etheral extract of male fern,	1 drachm.
powdered gum arabic,	2 drachms.
croton oil,	2 drops.

The pomegranate bark and pumpkin seed should be thoroughly bruised, and, with the ergot, boiled in eight ounces of water for fifteen minutes, and then strained through a coarse cloth. The croton oil should be well rubbed up with acacia and male fern, and then formed into an emulsion with the decoction. The worm is generally expelled with the head fastened to the side of its body at about its widest part, while the body is frequently twisted and doubled into various knots, the result of the distress caused by the powerful medicine.

ANY part of the bone of a man's arm, with the biggest end of a goose-wing being borne about one that hath a quartan ague, cures them.—*Culpeper*, 1656.

THERE is a stone to be found in the head of a long snail, which being beaten into a fine powder and blowne into the eye, takes away the web, spots, or other infirmities that annoy it.—*Culpeper*, 1656.

A FORMULA FOR NEURALGIA.

—Dr. Edward C. Huse has employed with success, in a large number of cases of neuralgia, the following combination of ergotine with the phosphide of zinc.

R. Zinci phosphidi, 3 i.;
Ergotin, gr. v.

In pilulas No. 60 divided.

One pill to be taken after each meal.—*The Richmond and Louisville Medical Journal*.

PATHOGNOMONIC SIGN OF PERTUSSIS.

—The practitioner may be sometimes consulted on a case of whooping cough, without having the opportunity of witnessing a paroxysm. In such a case, M. Bouchut recommends him to examine the frænum linguæ, which he will always find the seat of a small ulcer in children the subjects of pertussis, or who are on the point of becoming so.—*The Medical and Surgical Reporter*.

DEATH FROM LANCING OF THE GUM.

—In the *American Medical Journal*, for April, are given the particulars of the death of a child, fourteen months old, from hæmorrhage occasioned by the lancing of the gum over a molar tooth. The blood oozed from the divided gum for three days, in spite of all efforts to suppress it. The child was well developed, and healthy from birth, and no previous suspicions had been entertained of the existence of a hæmorrhagic diathesis.

TREATMENT OF LUPUS.

With regard to outward applications, I believe that their principal value is restricted to excluding the air, and that those are the best caustics which effect this most certainly and with the least pain. Perhaps the nitrates achieve this result more certainly than any other means. When the patient can remain indoors, and does not care about the dark stains caused by it, the nitrate of silver may be used; it is an excellent remedy, either solid or in saturated solution. In the lupus of children, previously spoken of, even a very weak solution can scarcely be borne. Here it is not a bad plan to use a solution of sulphate of copper (cupri sulph. gr. vi., aquæ rosæ 3 ii.) for some time till the sensibility has

become deadened. The acid nitrate of mercury is a very valuable preparation, and has the advantage of not forming so dark a crust. It is peculiarly suited for small, not very sensitive ulcers and tubercles. It may be brushed with a glass brush over the part, and should be used at first diluted with water till the full strength can be borne. When applied, a basin of water should always be at hand, and so soon as ever the pain begins to be felt the surface should be freely washed. The yellow nitrate of mercury may also be used in the form of ointment made with the lard as prepared by Mr. Squire. It is chiefly adapted to those cases where there is only slight or superficial ulceration, and to the lupoid form of sycoosis. It answers very well for those patients who cannot well have anything applied which produces a visible mark. These are the only external means in which I feel any confidence, and even these I look upon solely as so many aids to external treatment. If they are relied upon, both patient and surgeon must lay their account to the possibility, nay, even the great probability, of a relapse. Mr. Hunt, who has had a very extensive practice in these diseases, says the practice of using caustics is not only barbarous but useless, and M. Rayer distinctly says that whatever caustic may be used it must always be repeated often twenty or thirty times. Dr. Parkes, a most able and careful observer, entertains a very indifferent opinion of their value. It is true that views utterly opposed to these have been held by very good surgeons. Mr. Liston, for instance, thought that local treatment was alone to be depended on, and always used the chloride of zinc unsparingly. Mr. Gay, too, has seen the best results from the use of the pernitrate of mercury in lupus exedens. Professor Bennett seems to entertain a similar view. M. Cazenave thinks there is nothing like biniodide of mercury suspended in oil; but he admits that its action is very painful. Professor Hardy also clings to the biniodide. Mr. Wilson uses caustics, though he expresses himself very guardedly. Dr. Hillier eulogizes the iodide of starch, recommended by Mr. Marshall; he says its use is almost unaccompanied by pain. Dr. Frazer says that whatever medicine be given, local treatment is still of primary importance. Dr. Danzel, of Hamburg, looks upon solution of hydrochlorate of gold as more powerful and less painful than other caustics. Still it is clear, from what he says, that its operation is most severe. He uses a solution from half a scruple to a scruple in a drachm of distilled water, and works it deep into the bed of the ulcer by means of a fish-bone or glass style. Hebra relies upon the solid nitrate of silver, freely applied, and iodized glycerine; the latter being principally employed in the erythematous form. Cod-liver oil is almost his sole internal remedy.—“*On the Treatment of Lupus*,” by J. L. Milton.

CHLORAL HYDRATE AND CAMPHOR: CROTON-CHLORAL.

Last year (*London Medical Record*, May 7, 1873) attention was drawn to the fact that the intimate mix-

ture of equal parts of chloral hydrate and camphor will produce a clear fluid, which is of the greatest value as a local application in neuralgia. I have now employed this preparation for several months, and have induced many professional friends to use it also. Having in every case found great, and often instantaneous, relief follow its application, I think the members of the Association may be glad to have the opportunity of adding to the very uncertain stock of anti-neuralgic remedies which we have already at our disposal. Its success does not appear to be at all dependent on the nerve affected, it being equally efficacious in neuralgia of the sciatic as of the trigeminus. I have found it of the greatest service in neuralgia of the larynx, and in relieving spasmodic cough of a nervous or hysterical character. It is only necessary to paint the mixture lightly over the painful part, and to allow it to dry. It never blisters though it may occasion a tingling sensation of the skin. My friend Mr. George Wallis allows me to say that he has found it of great service as a remedy which patients can apply themselves for the relief of toothache; and to its success in this respect I can also personally testify. In the original article, the compound was recommended for arresting the progress of incipient boils and carbuncles. I have no experience of its value for this purpose.

The question of “An American Inquirer” in the *JOURNAL* of last week, as to the dose of croton-chloral, is one on which there is very considerable and general doubt since practitioners have frequently confused the dose prescribed by Dr. Oscar Liebreich for sleeplessness with that which should be given simply for the relief of neuralgic pain; and even for these two purposes the amount advised by different physicians varies considerably. Dr. Liebreich thinks that sixty grains may be safely administered as a single dose; while Dr. Burney Yeo (*Lancet*, Jan. 31, 1874) does not consider it safe in any case to go beyond fifteen grains, and advises that this amount be administered in doses of two to five grains every hour or half-hour until the desired effect be produced or the maximum be reached.

Considering croton-chloral as a hypnotic, I do not find that it has any advantage whatever over chloral hydrate, while it is from ten to fifteen times as expensive. I have occasionally found the effect of chloral hydrate increased by addition of croton-chloral, in the proportion of five grains of the latter to fifteen of the former. This combination is especially serviceable in cases of spasmodic asthma occurring during sleep. The sleep produced by the combined drugs is much deeper than that produced by ordinary chloral; but on awaking, there is frequently considerable stupor and headache. I have observed these same symptoms after administration of smaller doses of this combination, when taken for the relief of spasmodic cough while the simple chloral hydrate has produced no such effect in the same patient whether taken in the small or larger dose. One of the greatest disadvantages of croton-chloral is the uncertainty with which it acts since it is decidedly most serviceable in cases of neuralgia and of spasmodic cough—cases in which speedy relief is of the greatest importance. Thus, while hourly doses of one grain will produce the best results in one

case, in another frequent doses of five grains will produce no effect; while again, as in Dr. Falconer's case (*JOURNAL*, Feb. 28), disagreeable head-symptoms may be experienced after a single dose of two grains. I yesterday saw the prescription of an eminent physician ordering five grains every hour until pain was relieved, eight doses being prescribed. This appears a full dose; but certainly most practitioners will do wise to hesitate before giving the very large quantity in one dose, as advised by Dr. Liebreich. Croton-chloral is very slightly soluble in water, and glycerine does not largely increase its solubility. Probably the best way to prescribe it is in the form of pills. It mixes exceedingly well with a glycerine of tragacanth, and, when silvered or varnished, the pills are quite tasteless.—*British Medical Journal*, March 7th.

TREATMENT OF GANGLIONS.

Dr. Skey, of Bartholomew's Hospital, in a clinical lecture condemns the ordinary treatment of ganglionic swelling, which consists in giving a smart blow with a book or other body, and adds: "I advise you to adopt in great preference to this coarse and old-fashioned treatment the following, which rarely fails to obtain an early, if not an immediate, cure. Its object is to evacuate the entire contents of the cyst, and to bring its opposite surfaces into perfect apposition with each other. It is a small operation; but on the delicacy of its performance its success materially depends. Bending the hand forwards, in order to tighten the skin over the cyst, pass vertically into the center of the tumor a broad-shouldered lancet. By a lateral movement of the instrument the orifice will be dilated, and the contents will freely escape. Now it is indispensable to the obliteration of the cyst that the whole of its contents should be evacuated—every drop and every fraction of a drop: to effect which the sac must be compressed and kneaded in every direction. Then apply a well-made, thick compress of lint, and strap it down tightly with good plaster, and, lastly, a roller may be applied. In forty-eight hours the wound has healed, and the ganglion is seen no more."

INFANTILE AURAL CATARRH.

Dr. A. H. Voorhies, Professor of Aural and Ophthalmic Surgery, of Memphis, Tenn., says on this subject in the *Nashville Medical Journal*:

Not only anatomical facts, but daily experience, prove to us the great frequency of diseases of the ear in children.

Eur-aches are of such common occurrence with children that you scarcely know a child that has not suffered at one time or another in this way. If the proper examination is made, it will be seen that it generally depends upon inflammation of the middle ear, and not upon a neuralgic nature.

Otorrhœa is known to be one of the most frequent affections that we are called to treat in children between the ages of six and twelve, and I am sure that more than half are dependent on a previous inflammation of the middle ear.

Since experience teaches us that inflammatory dis-

eases are so very frequent with children old enough to point out the seat of pain, it is reasonable to believe that the same disease as often attacks those of a tender age; but that we are not so able to detect it, simply on account of the difficulty of recognizing the true state of things in the absence of a purulent discharge. The anatomy of the parts, combined with the well-known history of their development, prove how favorable circumstances are to the disturbance of the function of mucous lining of the middle ear. You will more certainly agree with me when I call to your recollection the intimate relationship between the dura mater and the mucous membrane of the middle ear, as the former extends along the "fissura petrosa—squamosa." Nearly all the fixed points are wanting, such as we have in adults, by which we are enabled to diagnose inflammation of the ear. We are obliged to rely upon a few prominent symptoms—to diagnose by exclusion, and look well to the result of our therapeutics. When the collection of pus is large, we can hardly fail to recognize the state of things; and the affection will soon declare itself by the peculiar cry of severe pain, as ascribed to this condition by some practitioners. The character of the cry, the great disquiet, and the disposition on the part of the child to bury its head in the pillow, will lead the physician at once to suspect otitis interna. The pain may last for days, without any intermission of consequence.

The crying will distinguish it from diseases of the lungs or trachea, but this cannot be relied on in inflammation of the brain or bowels; yet the absence of the more prominent symptoms of these affections will at once settle the question.

There is one important point that I would especially refer to—that is, the increase or decrease of pain in the movements of the child; for it will always cry in the peculiar way spoken of, when it is moved in the slightest. Accompanying this, you may almost always look for nasal catarrh, which in most instances, will be quite prominent. It is rather difficult to come to a definite conclusion as to the degree of deafness; still we can always tell whether the child, even of a very tender age, can hear loud sounds or not. That many of the attacks of convulsions, with stupefaction, are dependent, solely and entirely, on an otitis media, I have not the slightest doubt.

Now, what shall be our treatment when an otitis media is correctly diagnosed?

If the case is seen early, say within the first twenty-four hours, and the little sufferer is considered healthy I would order one leech to be applied to the front of the ear, while an evaporating lotion of some kind is placed around it, to relieve pain and hyperæmia. Have the meatus filled with warm water every ten or fifteen minutes; but never employ poultices, for all the good that such can do your patient can be obtained by the use of warm water, as mentioned, while much harm may follow the use of the poultice, in the way of establishing an obstinate otorrhœa. The frequent injections of luke-warm water through the nose will do much in the way of removing much from the pharyngeal space. Polinzer's method is my

chief reliance, for by this means the tube can be opened and an escape of the pus effected. It must be remembered that the Eustachian tube is not only relatively, but absolutely, wider than in adults.

This method of inflating the tympanum is far preferable to all others, since it can be employed at all ages, and in the face of the most determined resistance on the part of the child.

TEDIOUS LABOUR FROM DEBILITY, AND ITS TREATMENT.

By HUGH MILLER, M. D., FEL. OBST. SOC. LOND., GLASGOW

THE remarks in this paper apply exclusively to labours protracted from debility, but, in other respects, natural. I therefore, expressly exclude from consideration all cases in which the delay arises from the position of the child, or from an abnormal condition of the passages, and also cases complicated with rigid os uteri, or with spasmodic contractions of a tetanic nature, as well as those in which there exist obstructions arising from surgical interference. My remarks have reference solely to cases in which the delay is due to enfeeblement or failure of the natural powers of the organs specially called into action during the process of parturition.

Most obstetric writers apply the term "tedious" to all labours protracted beyond a certain period, whatever be the cause of the delay. While it appears to me that the physiological conditions of the case preclude the possibility of fixing for all cases a definite period, many obstetricians, following Dr. Ramsbotham, limit the definition of the term "natural labour" to those cases "in which not more than twenty-four hours are occupied from the commencement of true uterine action to the termination of the process." And the same author, in defining lingering or tedious labour, says that it denotes those cases "in which nothing calling for anxiety occurs, except the length of time that elapses under the continuance, so that it differs from a natural labour only in respect of its duration." Is not this method of basing a classification of labours on the element of time highly unscientific? It is in the first stage of labour that the longest time is occupied, and it is in that very stage that the consideration of the factor time is of the least consequence. It is to the natural differences of temperament that we must attribute the greatly diverse energies with which the organs act in different individuals. The standard of natural labour is one, therefore, that should have reference to the conditions under which the organ contracts, and, assuming no unnatural formation to obstruct its progress, it should not be held to have passed into the category of non-natural labour as long as the pains are active, and labour progressive.

Uterine action may be said to be a violent effort to expel a body in contact with the cavity which is no longer in harmony with it. The action is kindred to that of the bladder in evacuating urine, or to that of the heart during the systole. Taking the latter as the type of uterine action, analogy would teach that labour pains result only when the distension is sufficient to produce uniform contraction; and,

having once set in, the action proceeds in a truly peristaltic manner until the organ has been emptied of its contents. The rapidity of the action causes it to be mistaken for a simultaneous general contraction. The nerves which control the womb's action are not those of common sensation, but the sympathetic, which becomes a nerve of sensation only in special circumstances. The true contractions of the uterus originate among the fibres of the cervix and end at the fundus. Were the functions of this organ, like that of the other organs, performed by muscles composed of involuntary fibre, the contractions would be painless. Labour-pains, however, are spasms—violent effort by an organ to throw out a substance which has ceased to be in harmony with it. Recent observations show that the onset of uterine action is due to a decadence of the membranes, or of the membranes and placenta, and each recurring pain indicates a renewed effort to effect expulsion. Painless uterine contractions do take place, as, for instance, in primiparæ after delivery; but this lacks the force to expel other than liquid substances. Under healthy uterine action, then, the rapidity of the delivery bears a direct ratio to the force and frequency of the pains. In certain cases, no doubt, natural labour is hastened or retarded by other circumstances. Thus, in primiparæ, it is usually prolonged from an obvious cause, while, in phthisical cases, it may be accelerated from the attenuated state of the passages. In the case of a woman of average strength, where the pains are regular and effective, the uterus of a multipara may perform its function with sufficient vigour to complete the parturient act within two hours. Dr. Haughton of Dublin and Dr. Duncan of Edinburgh have made independent investigations on the propelling power of the uterus. The maximum power of an uterine contraction is estimated by Dr. Duncan to be equal to 50 lbs., and by Dr. Haughton 54 lbs. The uterus has thus three times the amount of power necessary to complete an uncomplicated labour. Now, to this uterine power nature has superadded the expulsive strength of the abdominal muscles, and the further force resulting from what is called "bearing down;" in this way, an economy of uterine muscular action is provided for, and provision made for the exertion by a healthy woman, in cases of emergency, of a force equal to 80 lbs. (Duncan), or as a quarter of a ton (Haughton). But, in large cities, there are forces at work which prevent this healthy standard from being reached, and to the extent to which the patient suffers from constitutional debility will we find her disqualified for continued exertion. It is in consequence of this that many ordinary labours are prolonged unduly. These cases are met with, not only amongst the poorer classes, as the result of insufficient food and overwork, but amongst the working classes, from their indoor life, early sedentary occupations, and their ill-cooked meals; and even among the middle and upper classes, from inactivity and artificial habits of life. The constitutions of a certain proportion of women are thus so deteriorated, that there results a very serious impairment of the parturient powers. Such women are unable to complete labour without

exhaustion. The labour often sets in fairly, with regular and effective pains, till, perhaps, the first stage is completed; after passing into the second stage, the pains alter in character, become more frequent and less defined, without periods of complete rest between them. Symptoms of acute fatigue are present. The muscles are irritable from exhaustion; they are losing power, are responding feebly, or not at all. The sufferer becomes irritable and anxious, thinks she should be assisted, and, perhaps, vents some ill-natured remark at the accoucheur standing listlessly by. On examination, the head is presenting naturally, and is usually found in the floor of the pelvis. Another digital examination in half an hour likely enough reveals no progress, owing to a true transient paralysis of the organ having ensued.

In another class of cases, the pains are slow and feeble from the beginning. The patient is usually the victim of disease, and the enfeebled parturient action is a fair indication of the lowered vitality. After a time, the pains become irregular, and seem to produce no effect on the os uteri, and they ultimately cease. In these cases, the powers of life appear to fail in the violent efforts required for expulsion. The uterus acts in sympathy with the general state of the system. Even when deficient or irregular action continues, the labour has ceased to be natural. From the resulting condition, spring many of the most troublesome complications connected with parturition. It is a condition which should by every possible means be avoided, and when it does occur, it should be relieved with the least possible delay.

Much, however, might be done for these classes of patients prior to the onset of labour. Even with the enfeebled woman, frequent and judicious administration of beef-tea and other kinds of nourishing food may obviate the tendency to exhaustion. Benefit may also be derived from the administration of the tincture of perchloride of iron; and, if near her confinement, I have even seen more benefit from the use of the liquid extract of yellow cinchona in fifteen-minim doses every four hours; while rest may be secured for a day or two when the non-effective labours happen during the first stage by the exhibition of a sedative. Until this first stage of the labour has been completed, I allow the patient her usual diet, she is not restricted to the recumbent position, and, if the labour be tedious, I endeavour to persuade her that no mischief is likely to result from the delay. My experience is at one with Dr. Hamilton of Falkirk, who, in his able article on the proper management of tedious labours, says: "I now rarely attempt to interfere with the progress of the first stage of labour, even when this is protracted for some days. Indeed, when I can, I keep as much as possible out of the way of my patients, recommend them to walk about or lie down, as they may incline, to take a little sherry and water to support the strength, and, in fact, I get over it the best way I can without interference." Indeed, if I differ at all from Dr. Hamilton, it is through paying more attention to the dieting than he appears to have done. I prefer beef-tea to his sherry and water, and,

instead of keeping out of the way, I see my patient at least daily, so that she may feel in no way anxious about her condition.

As illustrating my treatment of the first stage, I will read over the notes of a case.

Mrs. G., aged 35, of slender make, was confined with her third child; her pains were weak, short, and irregular; these had continued for some hours when I first saw her, she said about fourteen hours. The os had now opened about the diameter of half a crown. After waiting a little, finding the pains doing so little good, I left her. About six hours after I saw her again, the pains had become more frequent, teasing, and so constant as to prevent sleep, yet the os gave hardly any appreciable evidence of progress. To relieve her anxiety, I gave her an opiate, and arranged that she should receive her usual diet, with a good supply of beef-tea daily, until the labour was over. Four days afterwards I got a message to come at once. When I reached the house, the child was born, I was told, by a few very strong pains. She made a good recovery. In this case, it appeared to me that the uterine fibres were so relaxed and weakened as to cause the power of contraction never to get beyond the cramp-like initiatory efforts of the onset of labour. The pains were of a colicky character, the vagina was hot, and the secretion of mucus scanty. I have no doubt the rest in bed, along with the generous diet during these four days, helped very much to render the termination of this case so favourable to mother and child.

Whenever a woman has passed fairly through the first stage of labour, I remain with her and carefully mark the progress of it. With Dr. Hamilton, I have noticed "that the ratio of mortality to mother and child...is most intimately connected with the duration of the second half of the labour." The pains of expulsion vary in rapidity and in strength; sometimes a very severe one may be followed by several weak, useless ones; yet, on the whole, progress is made. When debility sets in, the pains become short, sharp, and recur more frequently. Indeed, like the feeble heart, the uterus is trying to make up for its weakened power by a quickened, excited action. With the onset of this condition, little or no further progress is gained. On examination, the passages are found quite sufficient to permit a natural delivery; but each recurring pain makes no permanent advance on the vertex, or may make no impression on it whatever. Should the obstetrician in attendance not deliver at this stage, he will soon find, in the quickened pulse, the furred tongue, the anxious countenance, the drooping spirits, and the failing strength, along with the gradually subsiding pains, that he can gain nothing by the delay. I have ceased now to wait for these symptoms, and, as soon as the strength begins to fail, I gently inform the patient of her condition; by the time she has made up her mind, it is time to interfere, and, these cases being the most favourable for the forceps, I have used these instruments without difficulty and without injury to mother or child. Thus Mrs. W., a young lady born and rear-

ed in the city, was lately confined of her first child. On the first day when I was called, she had labour-pains, but they were weak, and, after a few hours, these passed away, and she had seven hours' remission. At 5 o'clock on the following morning, the pains recommenced stronger and continued steady; the os uteri was opened sufficiently to admit the finger; the stomach was irritable, vomiting beef-tea and refusing all food. At 10.30 next morning, the first stage was completed, the head presenting naturally in the first position and at the brim. Bearing-down pains were regular, but short; she was very uneasy, speaking between and even during her pains. At 12.40, the head was in the pelvic cavity, and, as she was making no progress, I now delivered with the forceps. Mother and child did well.

I believe this timely application of the forceps to be a direct gain; for, when labour is retarded, we have induced a condition which, sooner or later, can lead only to mischief. It is true that nature is kind and serious injuries to the passages have taken place without producing after suffering; but a careful obstetrician should not run any risk. Many look upon the forceps as a *dernier ressort*, and prefer to give ergot. This remedy, if good, is one of a known power. In ten or fifteen minutes, it begins to exert its influence, and often for nearly an hour its effects continue upon the uterus, if the foetus be not by that time expelled. Ergot acts by inducing sharp uterine action, recurring with brief intervals of rest, and, even during these remissions of pain, maintaining the womb in a continued state of action. The drug can only be judiciously given when a speedy termination of the labour is reasonably to be expected. With regard to the forceps, we know when to employ them, when to modify their action, and when to cease using them. It seems also *à priori* more reasonable to assist a weakened organ by giving help from without than by endeavouring to effect relief through stimulants; and I believe we should use the forceps as a better, because a safer, plan of treatment than ergot, at all events, until the birth of the child, it appears best to relieve the exhausted uterus by some other means than that of applying force to an organ already overworked.

Professional opinion is still undecided with reference to the time when the forceps should be applied. Dr. Ramsbotham (page 242) says: "When the head is impacted for four hours without advance and recession, I think we are warranted in delivering." In the *Rotunda Clinical Report* (page 21), Dr. Johnston says: "When we found there was no advance, say, for two hours, we usually administered a stimulating enema, then waited for an hour or two, according to circumstances, and, if the pains were not producing any effect, a second enema was given, and, if this did not succeed, in another hour, we gave a dose of ergot (particularly if it were a multiparous case); and, if the patient were irritable, we put her under chloroform, and then, after passing the catheter, we proceeded to apply the instruments." And Cazeaux, in his *Treatise on Midwifery*, says (page 992): "If the head were low down in the excavation, and it had made no progress for seven

or eight hours, the forceps ought to be applied." Probably these authorities express the limit to which forbearance on the part of the attendant could be justified. I am certain these rules could not be followed, in many cases, without serious risk to mother and child. Dr. Burns seems to have appreciated the necessities of the case when he said that, "when mischief arises from the application of the forceps, it is always owing either to harsh and unskilful conduct, or to a state induced by delaying too long." It appears, to me that the time for bringing effective assistance is unmistakably indicated by the increasingly feeble efforts of the uterus. Nature should be helped when she shows that she can no longer, unaided, help herself. It has been urged that, from the sudden emptying of the uterus, flooding may take place. I have never met with this complication in any case I have delivered with the forceps, but I can understand how it may occur with those practitioners who apply this remedy "after the head has been impacted for four hours," for then the power of the uterus would be exhausted, and contraction rendered improbable. In these cases, the delay in delivery produces uterine inertia; if not the true inertia as obstetricians define it, it is at least an inertia similar to the temporary paralysis of the over-distended bladder, and, in this condition, the sudden emptying of the womb, doubtless, exposes the patient to this complication. But the case is otherwise if effective aid be given in time. The sudden relief from the pressure of an organ which still retains a certain amount of vital force will give rise to renewed vigour. A timely delivery should thus prevent, instead of cause, *post partum hæmorrhage*. When I have found it necessary to deliver in cases where labour-pains were absent, I took special precautions to avoid flooding, and it would only be when the condition of mother or child rendered delivery at once necessary that I would resort to this dangerous step. But the chief object of preventing delay in the passages, is to obviate any tendency to the very distressing diseases which occasionally follow inflammatory action. The late Sir James Y. Simpson said that vesico-vaginal fistula was "most commonly found as a consequence of difficult and prolonged labour, more especially the latter" (*Diseases of Woman*, p. 32.); and there can be no doubt the long continued pressure of the foetal head on the maternal passages is a very certain way of "producing mortification and sloughing of the vagina and part of the uterine wall." Kindred results have so frequently been observed by surgeons to take place when, even, for a few hours only, the hernial sac is strangulated, and also in other diseases accompanied by compression, that I believe the onset of inflammatory disease in the vaginal passages to be due more to the detention of the foetus than to any temporary injury which the judicious application of the forceps could give. When I began to apply the forceps at the onset of the patient's failing strength, it was with a view of securing, if possible, a living child, for the delay seemed to act as prejudicially against the foetus as the mother. In my private practice, I find, on an average, every twenty-sixth

labour suffer from the symptoms of debility; these I have delivered with the forceps, and in not one of them was the child still-born.—*British Medical Journal*.

TURPENTINE IN PYÆMIA.

Dr. J. Sinclair Holden relates the case of a work man in whom amputation of the fingers was rendered necessary by an accident. Gangrene supervened, a secondary operation was performed above the wrist, and was in its turn shortly followed by rigors, profuse sweats, sleeplessness, low delirium, subsultus, and stupor, the wound becoming sloughy and offensive. The man rapidly sank, in spite of free stimulation.

As a *dernier resort*, half-drachm doses of turpentine were administered in egg emulsion every four hours. After the third dose they were discontinued, as the pulse and temperature had fallen and consciousness returned. The patient partook liberally of brandy and beef-tea, but on the following day all the asthenic symptoms reappeared, and the patient relapsed into a comatose condition. The turpentine was again had recourse to, and with the same happy effect. This time the improvement was permanent, and the patient made an excellent recovery.—*The Lancet*, Jan. 31, 1874.

THE CANADA MEDICAL RECORD

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TO OUR SUBSCRIBERS.

We again beg to remind those of our subscribers who have not yet remitted to us their subscriptions, that we earnestly desire them to do so *at once*.

MONTREAL GENERAL HOSPITAL.

The fifty-first Annual Report of this admirable institution was presented by the Secretary, Dr. R. Palmer Howard, to the Governors, at their annual meeting, which was held on the 20th of May last, from which we gather that the ordinary income from all sources has been during the year 1873-4, \$29,916.46; the ordinary expenditure, \$33,797.10; showing a deficiency of \$3,880.64. The extraordinary expenditure has been \$11,216.17; the extraordinary income \$5,930; showing a deficit of \$5,286.17.

There has been expended upon the "Morland

Memorial Wing," \$14,940.71, and been received on account thereof, \$7,000, leaving a balance against fund of \$7,940.71. This deficiency will, however, be met by the late Mr. Morland's legacy of \$1,000, and a further sum of \$2,000 promised by the gentlemen who have interested themselves in perpetuating the memory of a gentleman who devoted so much time to the interests of the hospital. The money needed to complete the wing will be taken from "the permanent fund." The number of in-door patients treated during the year was 1,918, and of out-door 13,137, an increase of 97 in-door and 1,788 out-door patients over the number of last year. Amongst the sources of this increase in the number of admissions may be mentioned the greater prevalence of typhoid fever and of rheumatism during the years there having been 87 cases of the former and 104 of the latter in the year just expired, as against 36 cases of the former and 69 of the latter in the year which immediately preceded it.

Small-pox was the cause of the admission of one hundred and two patients—the disease having assumed epidemic intensity. With the view of neglecting no precaution likely to prevent the communication of that disease to the patients in the wards of the hospital, the Committee of Management last November employed a medical man to take sole charge of the small-pox patients in the isolated building devoted to that disease, and relieve the attending physicians of the hospital of that duty. With the same object, a room for the reception of the remains of persons who have died of small-pox has been built. Dr. Simpson, the physician in charge of the small-pox patients, has furnished the following facts, which, at the present time, are especially deserving of consideration. All the unvaccinated small-pox patients, except two, had the confluent form of the disease, *i. e.*, the serious form. Of the whole number of the vaccinated admitted with small-pox, only two had more than two good vaccination marks upon the arm, and only two had been successfully revaccinated. These latter two were so slightly affected by the disease that, except as a precautionary measure, they might have continued to follow their daily occupations. The disease throughout the winter has been of an extremely severe type, and towards the latter part of February it assumed a most malignant character.

Taking it all through, the Report is a very satisfactory one, and the subscribers to the charity have the satisfaction of knowing that the money which they have so liberally given has been the means of relieving a vast amount of human suffering.

WESTERN HOSPITAL OF MONTREAL.

We have been informed that a site for the proposed new General Hospital has been purchased. It is located on the Dorchester Street plateau, and forms a complete block. The extent of ground is about 100,000 feet. It is proposed to plant such trees as may be required to beautify the grounds this fall, the operation of building not being entered upon till next spring.

CANADIAN MEDICAL ASSOCIATION.

We direct attention to the advertisement of the Canadian Medical Association, which meets at Niagara Falls, on Wednesday, the 5th of August. By error, it was for some time advertised as taking place on the 1st of August, so that we hope our readers will note the change. From what we can learn, we believe the attendance will be good, and the meeting of a very interesting character. We trust that those who were nominated at St. John, New Brunswick, last year, to read papers at the forthcoming meeting will not fail in the task which was allotted to them, and from which we have reason to know, not a few of the members have been anticipating much mental enjoyment.

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

The tri-annual meeting of this the Governing body of the profession for the Province of Quebec, will take place in the town of Sherbrooke, on Wednesday, the 8th of July. We notice that a Committee has, at a meeting of the Governors, been named to suggest alterations to the by-law "concerning the study and practice of medicine, surgery and pharmacy," and that they will report at the forthcoming meeting.

A LIVINGSTONE SCHOLARSHIP

Is to be instituted at Charing Cross Hospital as a memorial of the great traveller who acquired a part of his medical education there.

CREMATION OF THE DEAD.

—The Communal Council of Vienna has adopted, by a large majority, the proposal of one of its members to establish in the cemetery the necessary appa-

ratus for cremation, the use of which will be optional and open to all. A similar proposition is now being agitated at Grutz; which contains a population of 1000,00.

PERSONAL.

Dr. Trenholme performed, on the 12th of June, excision of the uterus for fibro-cystic tumor, on a young lady who came from Ontario.

The patient is making a rapid recovery, so far not having had a single dangerous symptom. A full report of the case, together with an illustration of the uterus and tumor, will be furnished to our readers in a subsequent issue of this journal.

At the annual meeting of the "Female Home" Society, held on the 26th of May, the following appointments were announced by the President:—*Consulting Physician*, John Reddy, M.D., L.R.C. S.I.; *Attending Physicians and Accoucheurs*, Wolfred Nelson, C.M., M.D., Thomas D. Reed, M.D., and Thomas J. Alloway, M.D.

Dr. Cameron (M.D., University of Glasgow,) of Huntingdon, has been elected by a large majority, representative in the Local Legislature for the County of Chateauguay.

Dr. Thayer (M.D., McGill College, 1859) has gone to Europe with his family, and intends being absent for a considerable period.

Dr. Godfrey, Professor of Surgery, University of Bishop's College, has been unanimously elected an attending Physician to the Montreal General Hospital.

Drs. Phillip and Digby, of Brantford, have been named delegates to represent the Brant County Medical Association, at the forthcoming meeting of the Canadian Medical Association, at Niagara, on the 5th of August.

Drs. Eugene Trudel, Edwin Turcotte, E. Berthelot, J. Coyteux Prevost, Edward Painchaud, and — Paré, graduates of Montreal Branch of Victoria College, have sailed for Europe to still further promote their studies.

Dr. F. J. Austin, (McGill College, 1862,) formerly of Sherbrooke, has commenced practice in Montreal.

MARRIED.

At the Chapter House, London, Ont., on Wednesday, 10th June, by the Right Reverend the Lord Bishop of Huron, assisted by the Very Reverend Dean Boomer, R. Palmer Howard, M.D., of Montreal, to Emily, daughter of the late Thomas Severs, Esq., of Clapham, Surrey, England.

Original Communications.

Abstract of a paper on the disposal of sewage matter, read before the Sanitary Association of Montreal, June 6th, 1874. By RICHARD A. KENNEDY, M.D.C.M., Professor of Anatomy, University of Bishop's College.

The problem before us has been forced upon the attention of every civilized community during the present century, and to mention the various plans which have been tried would occupy too much time. The waste products of a community must be removed before decomposition sets in, else the results will be injury to public health, and the generation of a weakly and deteriorated population. This latter statement is amply proved by the accumulated experience of scientific men. As an example we find that London, during the 17th century, was visited by the plagues. The last, which is styled the great, occurred in 1665, and so great was the infection that 7,165 died in one week, and no less than 68,526 died in the city and its suburbs during the year. An idea may be formed of this immense mortality by considering the comparatively small amount of population which then existed. Foreign visitors of the time describe the condition of the houses and streets as being in a state of intolerable filth, and there is no reason to doubt, that if London had not been purified by the great fire which occurred in 1666, history would have recorded many subsequent invasions. Again, it is well proved that cholera and kindred epidemic diseases have their origin in filth and uncleanness. Cholera has always spread from the east; the favoring influence of a hot climate and the unsanitary conditions of densely populated districts, have more than once caused masses of putrefactive material to generate this poison which has devastated mankind.

Adventurous travellers describe the surroundings of Mecca as a vast offal ground, abounding in scenes of filth and disease, so that large numbers of pilgrims never return; they see Mecca and die. From such nests does disease spread, and disseminating itself through atmospheric influences finds in civilised communities the soil well prepared for its propagation. We know better, but our supineness and inaction favor its visitation. Impure water, lowness of building sites, and emanations arising from the decomposition of animal refuse are the local causes, now determined without doubt to have a more or less constant connection with the development and propagation of cholera and other diseases. Dr. Greer-

how observes, that "an atmosphere impregnated with the products of *fermenting excrement* is at once the most obvious and most constant concomitant of cholera." Such exhalations were often found where least expected, explaining the fact that pestilence sometimes passing over slums invades the dwellings of the rich. "It was found that persons appeared to suffer in proportion to the contamination of the air they breathed with the '*privy odor*,' and that immunity from this appeared to secure immunity from cholera." Other observers also confirm these statements. Observation also proves that our system of sewerage favors the spread of typhoid fever. 1st. By the passage of sewage matter into water afterwards made use of for drinking purposes (e. g., we are now getting the benefit of the sewage of the City of Ottawa.) 2ndly. By the issue of impregnated gases from defective sewers and water closets, which are the receptacle of the discharges from the sick. These observations will also apply to typhus, a fever made memorable by the epidemic which occurred in this city some years ago, and which will not be forgotten so long as the monument of its victims remain in sight of travellers passing Point St. Charles. Dysentery, diarrhoea and many other affections are also due to these conditions of uncleanness. These diseases have been mentioned because it has been fully shown that to "inefficient modes of removing the excreta of men and animals was due the great prevalence of disease in the middle ages." In villages and farm houses these evils are nearly unknown, because sewage matter is returned almost at once to the soil and rendered innocuous. It is only in large communities that the matter becomes of vital importance, and requires special modes of dealing with it. Taking the average amount of solid material excreted by each person, and reckoning our population at 120,000, there is a daily deposit in our cesspools and drains of 10 tons of fecal matter, being upwards of 4,000 tons annually. In this calculation fluid excreta is not included, this latter would probably amount to 30,000 gallons a day.

Two-thirds of all this material must find its way into our drains, there to decompose, to give off noxious and fetid gasses, and if it does not generate the poison of fevers or other disorders, it becomes a predisposing cause of them. There can be no doubt that the large amount of excreta which is locked up in our midst by the cold of winter, is so disintegrated by freezing as rapidly to decompose when summer comes, giving rise by its deleterious emanations to the frightful mortality amongst our infant population.

The mortality of this city is remarkable if we compare our cemetery returns with that of other cities, and this mortality would be increased if it were not that many families and sick persons are away from the city during the hot weather. Coming more directly to the subject before us, two questions meet us, which are more or less intimately connected. The first concerns us chiefly as sanitarians. In what manner can the effete products of our people be removed so as to produce the best results, both physical and economical? The second concerns us indirectly, but, as affording a solution to the first, may be discussed with advantage. How can these effete products be manipulated so as to render them available for agricultural purposes? It may be said that the latter question is needless, but if they can be made marketable the expense of removal may be defrayed, and that which is an offence will enrich the soil and return to us as a benefit. There is nothing new in this, the Mosaic laws ordain it, and I believe we will ultimately adopt some mode by which this can be effected. Much money is expended for fertilizers, and this, the best, we do not take advantage of. To revert to the first question of how can these effete products be best removed? and we must include all offal and house refuse in this designation; much will depend upon the circumstances of our climate. The sooner such material is removed is a necessity recognised by all. Hitherto only two modes have been found to be practical, and are now general in their use.

1st. That by water into sewers. 2nd. The pit method.

In regard to the first, I am of opinion, that, allowing any solid material, whether excreta or offal, to find its way into our sewers, is one of the most injurious and expensive modes which can be adopted. It is not only detrimental to health, but from the accumulation by deposit of so much matter in our drains, more expense is incurred in opening streets and cleaning drains than would be required to empty every pit in the city, even if all refuse were thrown into such pits. It may be more comfortable to have a closet in the house, it is certainly the most convenient, but surely we can have convenience and comfort without risking health, by adopting a better sanitary procedure. To remove solid material by sewerage in the cleanest and quickest manner involves so many conditions that it is almost impossible to have it done effectually. In this city, from the inequality of the streets, sewers are often so placed as to afford but little fall. Take the sewer in Jurors Street for example, which is almost level, and is consequently

nearly filled up, the washings of the street also adding to the obstruction by carrying down debris and gravel. A good fall is a necessity with frequent flushings, or else there will be accumulation and decomposition followed by disease. It has been calculated to take 25 gallons of water per head daily to keep common sewers clean; such drains as the above would require more than double that amount. Arrangements for trapping or other more complicated apparatus are very often defective, and in the best are sure to get out of order after a time, so that there are but few houses in which the air is not contaminated by the effluvia from the closets. As for the dry method, as it is called, accumulating in pits and occasionally removing, no words are strong enough to condemn such abominations. To allow these places to exist in our midst is suicide, for they are converted during the summer into seething and bubbling masses of putrefaction. And yet they exist under the windows of a large portion of our population, and cause us to deplore a great increase in the infant mortality of our city during the summer months. Many such places might be mentioned. One large tenement building, three stories in height, surrounds a small court yard, having a series of closets occupying the most of it. On three sides the only doors and windows open on to this court. The whole building is occupied by about 25 families, who are obliged to inhale constantly the exhalations arising from the pits. From professional visits to the place I have found that, even in the depth of winter, an insufferable odor comes from them. To purify such places by disinfectants and deodorants is both expensive and inefficient, and the occasional cleaning out is abominable from the great stench, and is also expensive. Attempts have been made to convert such material into fertilizers by chemical means. Heretofore such attempts have been failures, owing to their expense and to the heterogeneous masses of varying materials to be operated on. To fulfil all the requirements of a proper sanitary condition, demands a method different from those now in use, and there can be nothing more efficient than the daily removal of all excrement and house offal which should be thrown into the same receptacle. Boxes could be constructed on one plan with movable covers, so that as one box was removed it could be immediately replaced by an empty one. Some such plan is imperatively demanded in places like the one already mentioned, and our Corporation ought to be enlightened enough to adopt this simple method. If this plan was adopted no time would be given for decomposition, and our city would be all the better for it.

A valuable plan is at present in use in various places: Dry earth has been found to be the best disinfectant that can be used, but the expense attending its use precludes it from being generally employed. There is, however, a good substitute; a large quantity of ashes is accumulated during the winter, which might be kept for summer use in a box close to the closet, and a small quantity thrown into the receptacle as occasion requires, and thus we would have one of the best and cheapest deodorants that could be devised. The plan is simple, easily carried into execution, and the youngest child using the closet could attend to it. The material thus obtained, if perfectly dried, would form one of the best fertilizing agents, so that part of the expense of removal would be defrayed by the sale of it. The daily removal of refuse, etc., is carried out in one section of Glasgow, which contains 80,000 people; it is sent long distances at a profit, and is applied at once to the land without any preparation. The same is done in other cities of Great Britain. At Baden the excreta of 8,000 soldiers is removed daily and applied to the land, so that what was once a sandy waste is now a garden, the profit for one year amounting to \$3,400. These are examples which should encourage us to do likewise, at any rate the benefit to public health would counterbalance any extra expense at the outset, and would be the most economical in the end.

The application of Nitric Acid to the interior of the uterus. By WILLIAM GARDNER, M.A., M.D.C.M., Professor of Medical Jurisprudence, University of Bishops College.

(Read before the Medico-Chirurgical Society of Montreal.)

MR. PRESIDENT AND GENTLEMEN,—The application of caustics to the interior of the uterus in certain cases of disease of this organ, is admitted by nearly all authorities on the diseases of women to be an established and legitimate practice. Much uncertainty may be said, however, to still exist as to the precise cases which require this mode of treatment, and a wide difference of opinion still prevails as to the best mode of making intra-uterine applications and the best agent for this purpose. Lately the use of nitric acid has been advocated by Dr. Atthill, of Dublin, and this advocacy sustained by a series of published results exceedingly favorable to the mode of treatment proposed. These results were published and the mode of application described in the *Obstetrical Journal* for June 1873. The cases in which Dr. Atthill found this remedy most useful were enlargement of the uterus, whether from subinvolution, or congestion and chronic inflammation of the

whole organ, as well as of the mucous lining membrane (endometritis)—conditions attended with pain, profuse menstrual discharge, and leucorrhœa. The intra-uterine application of nitric acid has been also found very useful in checking hæmorrhage after the removal of tumours from the interior of the uterus, and in cases of uterine fibroid, in such a situation as to render them incapable of relief by surgical measures.

Dr. Atthill has further found that granular and ulcerated conditions of the os uteri yield readily to the topical application of this remedy. The following case of subinvolution, treated by this remedy may, I hope, be not entirely wanting in interest, and will, I trust, aid in eliciting the experience of the members of this society in the use of remedies to the interior of the uterus.

Mrs. D—, a young married woman, was attended by myself in her first confinement, in the month of August of last year. The labor was somewhat tedious, but terminated naturally, and everything went well afterwards. She, however, insisted, contrary to my advice, in leaving her bed on the fifth or sixth day after delivery. About two months after her confinement she came to me complaining of pain in the back, bearing-down pains, and leucorrhœal discharge, and asserted that all these symptoms had existed, to a greater or less extent, ever since her confinement, and were aggravated by any unusual exertion. I made no examination at this time, but prescribed a mixture of tincture of iron and quinine, and directed her to use vaginal injections of a weak solution of tincture of iron in water. This treatment she persevered in for some time, but with only a moderate amount of benefit. I lost sight of her for three or four months, when she returned to say that all the symptoms she previously complained of were much aggravated, and that, in addition, the menstrual discharge had returned rather profusely, lasting for seven or eight days at each period, being preceded and attended by a good deal of pain, and that she suffered very much from the symptom, for which Dr. Barnes has coined the word “dyspareunia”—painful sexual intercourse, the performance of this function being attended on each occasion by free bloody discharge, lasting for some hours. The slightest exertion now aggravates the pains previously complained of.

On examination with the finger in the vagina, the os uteri was somewhat patulous. When the finger was pushed up along the body of the uterus, this was found to be intensely tender. When the left hand was used to make pressure simultaneously on the

abdomen, with the right *index* finger in the vagina, the enlarged and tender fundus uteri was distinctly felt, lying somewhat to the left of the middle line, and to this situation the patient referred the most severe pain which she felt on exertion, and during sexual intercourse. The uterine sound entered without difficulty, and with the concavity forwards, to the depth of three and a quarter inches. The point of the sound was rather freely movable, indicating some enlargement of the cavity of the uterus. The introduction of the sound was attended with discharge of blood. Examination with the speculum revealed an open condition of the os uteri, the lips being congested and everted.

I decided to try the application of nitric acid to the lining membrane of the uterus after dilatation of the cervix. With this view two pieces of laminae were introduced and retained by a pledget of cotton wool in the vagina, being allowed to remain for twenty-four hours. The patient complained of a good deal of pain during the process of dilatation, and I found that the pieces of sea tangle had partially slipped out, so that the dilatation was not so complete as it otherwise would have been. A Marion-Sims' duckbill speculum was then introduced to the vagina, the concavity being well smeared with lard to protect it from the acid, and the os uteri brought into view. I now entrusted the holding of the speculum to the patient herself, as I had no assistance. This she did with her right hand thrown back. The anterior lip of the os was now fixed with a sharp hook and drawn down as far as possible. Holding the hook with my left hand I introduced with the right hand a wire gum catheter stilette, around a loop in the end of which a *strip* of lint had been tied, to the interior of the uterus, for the purpose of removing as much as possible of the secretions present. I then passed in another wire similarly prepared, the lint being steeped in the fuming nitric acid, up to the fundus, moving it freely round so as to act on every part of the lining membrane, and then withdrew it. A pledget of wetted cotton wool was then applied against the os uteri, the speculum withdrew, and the patient ordered to remain in bed for a week. No pain was experienced after the removal of the instruments for two hours, when she complained, but not to any great extent, of pain in the abdomen for an hour or two. During the next four or five days she had pain at intervals, being, however, entirely free from suffering during the greater part of each day. After a week the patient was permitted to leave her bed. The next menstrual period was painless, but the flow was quite pro-

fuse, lasting eight or nine days. From this date, I did not see my patient till some time after the second menstrual period subsequent to the application of the nitric acid. On enquiry, I was told that she considered herself well, that all the pains of which she used complain had left her, that sexual intercourse was painless, that menstruation was also painless, and that her general health which, previous to the commencement of the treatment was failing considerably, was now almost restored.

Progress of Medical Science.

POISONING FROM CORROSIVE SUBLIMATE GENERATED IN THE MOUTH FROM AMALGAM PLUGS IN THE TEETH

Having been invited by an eminent gentleman of the medical profession to attend a convention of the State Medical Society to submit to its consideration a matter of vital importance to the human family, and being unable to comply with the invitation, I have written this article to lay the matter before the medical profession and ask its co-operation.

The matter which I wished to bring to the notice of the profession is the poisoning of thousands of people all over the world from corrosive sublimate generated in the mouth from amalgam plugs in the teeth. Neither Asiatic cholera, nor small-pox, nor any malarious disease, is doing half the mischief in the world that is being done by this poisoning. Every medical man of any considerable practice has undoubtedly had numerous cases of it, but never knew what it was. The symptoms are so numerous and varied in different cases that it would be impossible to give them all in this short article, but I will say that a person poisoned in this way is liable to be treated for dyspepsia, neuralgia, paralysis, consumption, and numerous throat diseases. The patient gradually wastes away as if going into a decline, and no medicine will afford any relief. In many cases the difficulty steals on so gently as not to excite the least alarm, and continues very gradually for a number of years till the patient becomes a total wreck; while in others the attack comes on violently, and the friends and the attending physician think the patient is dying; but he will again rally, and again be prostrated.

There is such a resemblance in the symptoms to nearly all the diseases to which human flesh is heir that the physician is led to treat the patient for some disease which seems to be a very clear case, but his patient gets worse. In more than twenty cases that I have had, nearly all had been pronounced by some physician as having consumption. In nearly all the cases there are at times a very bad cough, eyes sunken, and haggard expression and deep blue or dark color under the eyes, invariably a metallic taste in the mouth, water flowing from the mouth in the night while asleep so as to wet the pillow, and in most cases extreme prostration.

I have not time now to detail the manner in which the corrosive sublimate is formed in the mouth, further than to say that the quicksilver in the plugs is driven off by the heat of the mouth in very minute particles, and, combining with the chlorine in the fluids of the mouth, or any saline substance, such as our food, passes into the stomach, and produces slow poisoning. If the State Medical Society will appoint a committee to visit this place, I will show them several cases that will place the matter beyond controversy.

There are some twelve thousand dentists in the United States, doing a wholesale business at this poisoning, and I ask the co-operation of the State Medical Society, as guardians of the public health, to assist in getting an act of Congress passed making it a penitentiary offence to place any poisonous substance in teeth that will injure the people.—*J. Payne, D.D.S., Chicago Medical Journal.*

ON THE PRACTICAL IDENTITY OF TRUE CROUP AND DIPHTHERIA.

Read before the Philadelphia County Medical Society, Feb. 11, 1874.

BY BENJAMIN LEE, A.M., M.D.

Hays's Journal for January, 1870, contains a valuable and suggestive article with the following title: "Case of Diphtheritic Croup in which Tracheotomy was performed; Death on the Seventh Day from the Systemic Poison. By John H. Packard, M.D., of Philadelphia." At the close of the paper Dr. Packard says, "As to the cause of death. It is a very common opinion that the existence of false membrane in the bronchi or trachea is a strong contra-indication to operating, and that its absence is in favor of success. Yet in the case now detailed there was no such deposit found anywhere in the air-passages after death, although some casts were coughed up within the first three days. The child died from blood-poisoning; all that could be gained by the operation was gained."

"THE CHILD DIED FROM BLOOD-POISONING," or—as the doctor puts it boldly and distinctly in his title, thus distinguishing it from that blood-deterioration which results from deficient aëration—"FROM THE SYSTEMIC POISON."

My own belief is that in many, perhaps the majority of fatal cases of croup, the cause of death is the systemic poison, and that in all cases of croup our main chance of success consists in counteracting the systemic poison. It is in this belief that I offer the following remarks. At the time that I entered upon the practice of my profession in the city of New York, the medical mind was greatly agitated upon the subject of diphtheria, which had burst forth as an epidemic in several centres at the North and East, but nowhere so destructively as at Albany. A new disease to most of those who were thus suddenly called upon to confront it, they were naturally at a loss to know on what ground to meet it. Unfortunately, it was usually looked upon as a sthenic

inflammation, and vigorously combated with antiphlogistics. That seductive little termination, *itis* which so charmingly simplifies our pathological theories, supplying a bran-new, ready-made nosological nomenclature, with the very trifling expenditure of thought required in appending the same to the Greek (or, as was and is often ignorantly done, to the Latin) name of the organ or tissue which appeared to be most prominently affected in any given case or class of cases, was now most shamelessly married to one of its own family,—tacked on to the end of a morbid process,—and the resultant monster was diphtheritis, or an inflammation of a false membrane. The philological blunder we may pass over with a smile, but the pathological blunder which it expressed and the therapeutical blunder which it induced we can only look back upon with horror. The fatal character of those early epidemics is only too well remembered. But gradually light dawned. Some practitioners, empirically, simply seeking to avoid those remedies which at least produced no beneficial result,—others, on theoretical and rational grounds, tracing in the symptoms the general outline of a systemic blood disease,—began timidly to pursue a supporting plan, and to seek for an antidote to the suspected poison. This was found in the salts of chlorine; and diphtheria speedily became the more manageable disease it is to-day. The analogy between the exudation of croup and that of diphtheria early attracted attention; but a still further analogy impressed me even more deeply,—that exhibited in the unhappily similar results of the same line of treatment,—viz., the depletory and depressant, the grandly named antiphlogistic plan applied to the two affections. The mortality in both under similar arrangement was almost identical, and in this I recognized an argument for the identity of the morbid processes, and determined, when occasion presented, to test the matter by exhibiting in croup the class of remedies which had changed the whole complexion of diphtheria. The opportunity was some time in offering itself. In the course of perhaps a couple of years having in the mean time had occasional cases of the latter disease to treat, I was summoned by telegraph to New Rochelle to see a child suffering under the former. Before leaving the city I fortified myself with a large phial of solution of chlorate of potassium, and a number of sulphate of quinine powders. The physician in charge was an elderly gentleman, of great intelligence, but who had for a considerable period retired from the active practice of his profession. The case was in the second stage, and, although not of the most intense grade, had progressed steadily, and as yet shown no signs of amelioration. The treatment had been thoroughly routine,—emesis by ipecacuanha, antiphlogosis by tartrate of antimony and potash, and defibrination by calomel. I concurred in its propriety, but suggested that it had already accomplished all that it could do, and that the time had perhaps arrived for substituting a supporting course. This was readily acquiesced in. I had the satisfaction of learning the next day that the symptoms already showed some improvement. The child

recovered, happily. I would like in this connection to call attention to the formula which I employed for the preparation of the chlorate of potassium solution, as I doubt if it is in general use, and am confident of its superior efficacy:

R. Potass. chlorat ℥viii;

Acid. hydrochloric., ℥viii;

Rub together until greenish fumes of chlorine begin to rise, then add aq. cinnamon., f ̄ viij.—M.

S.—A tablespoonful every two hours.

This preparation contains chlorine, as will readily be seen, not only in its saline combination, but also free, and may be called the chlorinated solution of chlorate of potassium. It is the prescription of a British physician, whose name I unfortunately failed to preserve in appropriating his idea, and has certainly a peculiar potency, not only over diphtheritic processes, but in that troublesome, and just now frequent, form of throat-disease,—ulcerative tonsillitis,—the *herpes gutturalis* of Trousseau. I am well aware that a single case will not serve as a peg to hang a theory on, but it may answer for a text in connection with that first referred to. That I have never had another case of croup to treat is accounted for by two facts: the first, that I shortly afterwards withdrew from family practice; the second, that I invariably examine the throat of a child presenting febrile symptoms or acute disturbance of digestion, and attack every case of acute faucial congestion that offers itself, at the outset, with chlorate of potassium and quinine, carefully avoiding cathartics and depressants, and thus, as I believe, prevent the development of the diphtheritic poison. Had I, however, only my own meagre experience to adduce in support of the theory for which I am contending, I should be guilty of shameless presumption in airing it before a body at once so learnedly critical and so practically familiar with the facies of the affections in question. My design is rather to make use of the observations of those who have had larger opportunities and made a better use of them, in showing, first, that the analogy between these two diseases in every essential particular is so striking as to amount to a proof of identity, and secondly, that such an opinion is now steadily gaining ground among those who have most carefully studied them in their clinical as well as their pathological aspects.

Diphtheria may be defined in the light of the most recent investigations to be a zymotic disease, affecting the entire system through the presence, and probable multiplication, of a foreign living organism in the blood, having as a local manifestation an effusion of plastic coagulable material in the substance of the mucous membrane of the cavities of the mouth, pharynx, and nose, or an exudation of the same upon its surface. Its general symptoms are gradually increasing heat of skin and frequency of pulse, the latter rapidly becoming feeble, slight digestive disturbance beyond loss of appetite, and a degree of general prostration of the nervous forces quite out of proportion to the local lesion. In fatal cases, death evidently results from systemic poisoning.

It is usually plainly epidemic, or contagious, or both.

As to its therapeutics, a system of depletion, whether by blood-letting, or active catharsis, or excessive emesis or profuse diaphoresis, or of contra-stimulus by the prolonged use of nauseants, and notably of tartrate of antimony, is almost invariably followed by an aggravation of the symptoms, and if persisted in, too frequently by a fatal termination. On the other hand, the free exhibition of an antizymotic, of which chlorine, either in solution or in composition with iron or an alkaline salt, appears to be the most deadly to this form of fermentative growths, and of bark or one of its alkaloids (of which quinia still stands *facile princeps*), a nourishing diet, and comparatively early resort to stimulus, will in the majority of instances conduct the case to a favorable issue.

Now, I claim that no one can take up a standard text-book on children's diseases, if the production of an author who holds the mirror fairly and squarely up to nature, instead of squinting at her through the crowquill of preconceived bias and prejudice, and read the description of these two diseases, without being struck with close resemblance in their mode of invasion, progress, character of fatal termination, when not induced by immediate suffocation, and rate of convalescence. Even writers who believe croup to be a sthenic local inflammation are forced to admit that the febrile action is of a markedly lower grade than that which obtains in simple uncomplicated or spasmodic laryngitis. Thus, Meigs, than whom no one has described more faithfully the natural history of children's diseases, says, in treating of the differential diagnosis of these two last-mentioned affections, "The pseudo-membranous form of the disease is often preceded or accompanied by the presence of false membranes in the fauces, which is not the case in spasmodic, simple laryngitis; the symptoms of invasion of the former disease are *less acute* than those of the latter, the *fever* being *less violent* and the restlessness and irritability less marked than is usual in the simple affection, in which the general symptoms are severe from the first. The hoarseness of the voice and the cough follow a different course in the two diseases; the progress of these symptoms being slow and gradual in the membranous, and much more rapid in the severe spasmodic form. The fever is violent throughout the attack in the severe spasmodic disease, whilst in the other form it seldom reaches a high degree of intensity." He aptly describes the invasion of true croup as "*slow and creeping*." What means this "*slow and creeping*"—this stealthy and masked—advance upon the citadel of life, but the development and diffusion throughout the body of a morbid material, gradually making itself master of all the avenues of approach? What has it in common with the bold onset of a frank, declared inflammation, such as an acute pleuritis or simple laryngitis? And how closely is it in relation with the prodromic period of most of the true fevers, and of diphtheria!

Bouchut, in his admirable work on children's

diseases, entitled "Traité pratique des Maladies des Nouveaux-Nés et des Enfants à la Mamelle," unhesitatingly attributes to croup two of the essential characteristics of zymotic diseases,—first, that it does not ordinarily attack the same individual a second time, and secondly, that it is an epidemic disease; and, although he avoids committing himself unqualifiedly to a belief in its contagion, he considers it safer to separate children suffering under it from the healthy.

My impression, from consulting other authorities, is strong that these three traits of resemblance must all be admitted. So much, then, for the general family likeness existing between the two affections. Let us now consider the argument from therapeutics.

Prof. Fordyce Barker, of Bellevue Hospital Medical College, New York, in a communication addressed to Prof. A. Jacobi, on the "Treatment of Croup," which was published in the *American Journal of Obstetrics and Diseases of Women and Children*, vol. iii. No. 1, May, 1870, boldly takes the ground that true croup and false croup are one and the same disease, differing only in the depth to which the tissues are involved, excluding the croup of diphtheria, which he considers a totally different affection. Entertaining, as I do, in addition to the sentiment of respect which the opinions of so conscientious an observer and so skilful a therapist as Dr. Barker command in the professional mind both at home and abroad, that sense of deference which a pupil must unavoidably carry with him through life towards a revered master, I still find myself unable, after a careful reperusal of his paper, to accept the position which he here assumes. He appears to found it, although not perhaps, avowedly, on the fact that the same remedy, administered at the outset, is, in his hands, equally efficacious in controlling both affections. This remedy is the "turpeth mineral," or yellow sulphate of mercury (hydrargyri sulphas flava); and the astonishing success which he has met with in its employment, never having lost a case of croup in the course of a long and intensely busy professional life, devoted in an unusual degree to the treatment of children's diseases, certainly entitles it to a most respectful trial. It must be borne in mind, however, to weigh honestly the value of this testimony, that Prof. Barker would call no case croup in which a particle of diphtheritic membrane had been observed upon the fauces. But, this aside, let us consider for a moment whether the agent which he employs does not possess properties which may render it of extreme value in both the simple spasmodic laryngitis and the diphtheritic infection. Every one knows that prompt emesis is the one thing needful (to speak in a general way) to control and usually immediately relieve the laryngeal spasm.

Dr. Barker's reasons for preferring this particular means of emesis to all others in croup are the following: "It acts more promptly and efficiently than ipecac or alum; it is tasteless, and much more easily administered than either; it does not exhaust and depress the vital power like antimony; it is equally prompt in its action with sulphate of copper

while it is much more effective as a revulsive and sedative." He adds, "I think the active emesis from the turpeth mineral accomplishes the following results much more effectively and speedily than any other agent: it depletes the mucous membrane, by an abundant secretion of mucus which is thrown up; it removes from the larynx, by the forced expiration which it causes, any albuminous or fibrinous exudation which may be there in a diffuent state, and which by remaining may become subsequently pseudo-membrane; it acts as a powerful revulsive, and thus diminishes the capillary circulation in the trachæa and larynx, and thus it becomes a most effective agent in arresting the inflammatory process."

But if an emetic is universally admitted to be the requisite in the spasmodic affection, not less general is the faith in its beneficial action in the diphtheritic or pseudo-membranous. And if we were called upon to sum up the characteristics of an agent of this class which would best satisfy the requirements and present the fewest objectionable features in the latter form of disease, we could not do so more forcibly and succinctly than he has done in the above description of the properties of this medicament. But do its valuable properties as regards diphtheritic croup cease with its power of inducing prompt emesis? I think we are entitled to return a negative answer to this enquiry, on two grounds. First that it is an active depurating agent in causing "so abundant a secretion of mucus, which is thrown up;" but, secondly and especially, because it is a sulphur compound, and sulphur is well known to be one of the most determined and destructive foes to the mycroscope which the Pharmacopœia can command. Its efficacy in destroying the disease-germ present in spasmodic cholera can, I think, no longer be questioned, and it may be as potent over the micrococcus of diphtheria. May not the beneficial action of sulphate of copper, of sulphate of zinc, and of alum, the sheet-anchor of the elder Meigs, aside from their emetic properties, be reasonably attributed to the same component? And if so, do we not see an explanation of the superior value of the mercurial salt in the fact that mercury appears to possess to a more striking degree than any other mineral the *open sesame* to the circulatory and absorbent systems, obtaining admittance not only for itself, but for any remedy with which it may be for the time in the intimate companionship of chemical affinity,—a prompter entrance into the vascular system, and more immediate distribution throughout the body? May we not also read in the same light the happy results which have led the younger Meigs to place such confidence in the mild chloride in the management of membranous croup? Is he not administering that subtle and admirable antizymotic, chlorine, with a directness and efficacy perhaps even exceeding that with which many of us accomplish the same result in the exhibition of the much-trusted chlorate of potassium.

If the commencement of Dr. Barker's treatment appear admirably adapted to cut short a case of *diphtheritic* croup, however, not less appropriate is

its continuation should the disease fail to be thus early arrested. Carbonate of ammonium as a vascular stimulus and promoter of mucous secretion, veratrum to shield the heart and vessels from excessive fatigue and fatal prostration, and quinia to sustain the nervous forces, constitute an armamentarium with which the practitioner might well feel himself tolerably equipped to meet a case of pure pharyngeal diphtheria. Nor must it be forgotten in this connection that all the preparations of cinchona have a peculiar potency in checking fermentation, while in sulphate of quinine we again have the sulphur element entering the problem.

Under the title of "Diphtheria in its Epidemiological, Nosological, and Therapeutic Relations," Dr. Max Jaffe, of Hamburg, presents, in *Schmidt's Jahrbucher* for July, 1873, a complete résumé of the periodical literature of this subject during the past four years. The first portion of the paper, that which discusses the epidemiological side of the question, is mainly taken up with the mode of communication and pathological histology of the disease, and the histories of recent epidemics. Numerous interesting experiments in the way of inoculation of the lower animals with diphtheritic poison, on the part of Dr. Oertel of Munich, Letzerich of Braunfels, and others, are rehearsed, especially with the view of determining whether "in diphtheria we have to do with a merely local affection, or with a general infectious disease,"—a question, as he well remarks, of the deepest import, as well for scientific inquirers as for the practising physician. The results are almost invariably in favor of the latter view, that which makes diphtheria a systemic disease with a local manifestation, not a local affection with a resulting disturbance of the general system. A constant microscopic element in the diphtheritic exudation has been found to be fungous growths of extreme minuteness and of immense numbers. These growths are classed as micrococci or mykothrix. They are found not only in the diphtheritic membrane and in the mucous secretions, but also in great profusion in the blood, distributed through all the organs of the body, and even in the lymphatic vessels and glands. In some instances the lymphatics appeared to be entirely blocked up by them. Collections of these minute organisms were also noticed in the inter-spaces of the areolar tissue, and between the fat cells. The kidneys appeared to be the organs to which they were more especially attracted, and in these their presence often coincided with a high degree of inflammation and microscopic extravasations of blood. The second division of the subject is devoted to the consideration of the "Pathology and Anatomical Pathology" of the disease, and it is to this portion that I especially desire to call attention.

Dr. Ludwig Letzerich, in an article "On Exudation and Suppuration" (croup and diphtheria), contributed to *Virchow's Archiv* (liii. 4, p. 493, 1871), after defining croup as a purely inflammatory process, and diphtheria as, on the contrary, caused by the deposit of a foreign fungous growth, which, piercing the epithelium, makes its way into the substance of the mucous membrane, and thus at the same time

excites the diphtheritic exudation and provides for its escape,—while, I say, drawing this distinction carefully, he immediately after makes the following important admissions. First, that the diphtheritic membrane varies greatly in appearance, both under the microscope and to the naked eye, in accordance with the portion of the mucous membrane upon which it is found. On those mucous surfaces which are lined with smooth tessellated epithelium (as those of the mouth, nose, fauces, and vagina) it is usually strong and thick, and microscopically exhibits an abundant dissemination of epithelium-cells, either broken down or well preserved, and a greater or less quantity of pus-cells. On surfaces covered by ciliated or cylindrical epithelium (as the larynx, the upper part of the trachea, and the intestinal canal) it is softer and more creamy; the epithelium is completely eroded, and portions of the exudation appear, under the microscope, as mere masses of detritus, thickly strewn with fungous growths.

Second, that croup and diphtheria are developed together with extreme frequency, passing immediately into each other. Croup, he tells us, is very rarely developed with diphtheria of the mouth, nose, or fauces, but often,—indeed, almost invariably—with diphtheria of the under surface of the epiglottis, of that portion of the larynx which lies above the vocal cords, in the lower part of the latter, and in the trachea. This striking fact of the co-existence of the two diseases he has had frequent opportunities of verifying by post-mortem examination. In one case the mucous membrane of the entrance to the larynx was completely destroyed by fungi, while that which lay below the vocal cords was scarcely robbed of its epithelium, simply overlaid with a very thin, creamy layer of diphtheritic exudation. The tracheal mucous membrane, on the other hand, from its commencement down to the bifurcation, was covered with a homogeneous croupal exudation, which was with tolerable ease removed as a complete tube. No fungous forms whatever were found in this case, but a more or less regular stratification of the mass with pus-cells. The mucous membrane of the trachea retained its epithelium, freely strewn with puruloid cells, and its basal layer deprived of its cilia, as in pure uncomplicated croup. Death ensued in this child from collapse, induced by the entrance of fermentative fragments into the circulation and the collection and reproduction of the fungi in the internal organs, especially the kidneys and spleen.

An essay delivered before the Medical Society of Berlin by Dr. Conrad Kester (reported in the *Berlin. Klin. Wochenschr.*, ix. 18, 1^o, 1872), on the Nature of *Diphtheria*, provoked a very animated discussion. He boldly took the ground that from the stand-point of the practising physician it was impossible intelligently to maintain the line of demarcation between these intimately-allied forms of diseased action. Diphtheritic and croupous angina, membranous, gangrenous, and false croup, he considered it impossible to hold as distinct diseases appearing together and running the same course of symptoms, simply and only because (and this per-

haps for accidental reasons) the form of the exudation is different. Pathological anatomy explains the difference in showing that in the one case the exudation is superficial, and may then be thrown off as a membrane, while in the other it penetrates deeper into the tissues, producing necrosis, and thus leading to the formation of sloughs. In both membranous and gangrenous anginas we find alike, at the autopsy, diphtheritic sloughs or strongly adherent, deep-rooted deposits, without exception, in the fauces and pharynx and as far as the edges of the epiglottis, and, as we pass into the larynx down the trachea and into the bronchi, only membranous tube-casts, easily removeable. We find there a complete mingling of the two forms, and are led to the inevitable conclusion that the character of the exudation is dependent upon the anatomical constitution of the locality in which it is thrown out.

Dr. H. Senator, while supporting the ordinarily accepted view of the distinct entity of the diseases in question, acknowledged that he had never seen a true croupous inflammation and a corresponding true croupous exudation (a fibrous net-work with concentric layers of fibrin and pus-corpuscles) affecting the mucous membrane of the pharynx, either in diphtheria or any other affection, while, on the other hand, a croupal inflammation, under the influence of a diphtheritic infection in the true air-passages, that is, a diphtheritic croup, was an undoubted fact.

Dr. Lewin, in the *Berlin. Klin. Wochenschr.* and other journals, recognizes two forms of the diphtheritic process,—a protopathic, which attacks those mucous surfaces which are most exposed to the external air, is rarely accompanied by fever, often appears sporadically, and is very amenable to simple remedies; and a deuteropathic, which penetrates to the more protected cavities, is preceded by a prodromal fever, and gives every indication of systemic infection. This is the more purely epidemic form, and is extremely difficult to manage.

In regard to the question of the identity or non-identity of the "diphtheritic and croupous processes," he holds that in their clinical relations they present a precisely similar configuration, have the same aggregate of symptoms, and consist of the same etiological elements, but anatomically are distinguished by the fact of being deep-seated or superficial. The cause of this difference, however, appears to lie only in the pre-existing histological characteristics of the membrane attacked,—diphtheria on pavement-epithelium, croup on ciliated epithelium; and the laryngeal croup, so often recognized as an independent affection, is therefore only to be regarded as a local manifestation of the diphtheritic process. In reviewing the history of medicine, Dr. L. recalls the fact that since the time of Bretonneau, who regarded croup as essentially laryngeal diphtheria, no author had undertaken to establish a distinction between the diphtheritic and the croupous processes until Virchow, and that even he did not desire to extend his pathologico-anatomical distinction to the clinical aspect of the disease.

Further, the results of treatment and the revelations of the autopsy agree in declaring that both processes may run their course simultaneously in one and the same individual. The purely histological distinction is thus set forth. In the larynx we find two sharply defined histological regions, that of the pavement-epithelium, extending from the pharynx, along the lingual surface of the epiglottis, thence along its laryngeal surface upon the false and the true vocal cords, and reaching nearly to the *mucula flava*, and that of the ciliated epithelium in the lower regions of the larynx and trachea. Closely corresponding with these tracts, we often find, in autopsies, the diphtheritic and the croupous processes separated from one another by this same boundary-line. More than this, during life the same differentiation can sometimes be made out by the aid of the laryngoscope. Similar observations may be found recorded by Virchow, Riudfleisch, and Wagner.

In support of the theory that laryngeal croup only originates from the extension and descent of the diphtheritic affection from the pharynx, he adduces the following consideration. According to all reliable statistics, croup developed primarily in the larynx must be classed among the greatest of rarities. And even these few exceptional cases are often susceptible of other explanation. Diphtheria not seldom runs its course in the larynx unobserved; in those rare cases in which it has been unquestionably observed first in the larynx, it has in all probability taken its rise in the region of the pavement-epithelium, and finally, in cases where no laryngoscopic examination has been made it is more than probable that a severe catarrhal laryngitis has, in consequence of the severity of its symptoms, been mistaken for laryngeal croup. In point of fact, catarrhal laryngitis may often, by a serous transudation, or a copious infiltration, or even a hemorrhagic extravasation into the areolar tissue of this portion of the larynx, induce a constriction of the glottis and simulate the tone and the dyspnoea of croup, without the presence of any croupal membrane.

In a treatise on "*Croup and Diphtheritis of the Pharyngeal Cavity, Exudation and Pus-Formation*," Dr. Franz Hartmann, of Wiesbaden (*Virchow's Archiv*, liii. 2, p. 240, 1871), concludes that we are entirely unable to decide as to the "*identity or non-identity of croup and diphtheria*" from their clinical course, and that we must therefore refer to the development of the pathologico-anatomical processes for a solution of the problem. As regards the exudative process, every exudation has its origin in the vascular system, and consists of a coagulable fluid. In the production of the exudation, the capillaries of the lymphatics, which are closely connected by means of the so-called *serous* (juice) *vessels*, are both concerned. The anatomical arrangement of the mucous membranes is such that there is a possibility of the escape of plasma upon their free surfaces, and in diseased conditions this possibility becomes an actuality. In the pharyngeal cavity this escape of exudative material is favored

by the firm compression of the mucous membrane, by means of strong muscular contractions. The primary exudation either coagulates at the spot where it is poured out, or flows down and coagulates below, constituting croup; but the subsequent exudation, in consequence of the muscles having to a considerable extent lost their contractility, is retained in the areolar tissue: that is diphtheria. The croupal exudation, therefore, always precedes the diphtheritic. Sometimes in consequence of the inflammation being from the outset very acute, the muscular action is greatly interfered with, or even entirely suspended. We have then neither croup nor diphtheria, but angina, with or without abscess. It follows that in order to the establishment of the croupous process the inflammation must not be of a severe grade. He concludes, finally, that croup and diphtheria are not to be distinguished from each other, but are to be regarded as only different stages or grades of one and the same morbid process, no anatomical differentiation being possible.

Dr. Welsch, a physician practising in Kissingen, publishes several cases of croup and diphtheria occurring simultaneously in the same family, which, he considers, *establish the identity of the croupous and diphtheritic processes*, and refers to others which he met in the same neighborhood shortly after, as equally significant.

From the year 1868 to 1872, the north of Italy was the scene of a wide-spread and devastating epidemic of diphtheria, which reached its acme in 1871. So great were the alarm created and the interest excited by it that a committee of the most learned French and Italian physicians of the region was appointed to consider and investigate the subject in all its relations. This committee was unanimously of the opinion that the distinction between croup and diphtheria was one which could no longer be maintained, either from a pathologico-histological or a therapeutic stand-point.

In conclusion, I cannot summon to the support of my position a more powerful ally than Dr. Morell McKenzie, one of the highest British authorities on the larynx, whose opportunities of observation have not been greater than his powers of analysis. This writer, in his Jacksonian Prize Essay on Diseases of the Larynx, quoted by himself in the *British Medical Journal* of March 5, 1870, vigorously combats the doctrine of the distinct nature of these affections, on the following grounds: That neither is always, and both are sometimes, epidemic and contagious; that the exudation is essentially the same, being modified by its site, but presenting histologically no marked difference,—that of diphtheria having been noticed to become organized as well as that of croup; and that the sequelæ of diphtheria—albuminuria and impaired innervation—have also been observed to follow croup.

The opinions and facts just rehearsed, whether they carry conviction to the mind or not as to the point at issue, must be allowed to establish the fact beyond a peradventure that there is in Europe a large, respectable, and growing class of physicians

who, however they may differ in their views of the mode of production of these two morbid results, and the accompanying pathologico-anatomical and histological changes and conditions, agree in holding that if not essentially they are at least practically clinically, and therapeutically to be held as one and the same disease. And whether they are identical or not, this much must be allowed, that at the commencement of the attack so similar are the modes of invasion that no man can tell whether the case will prove to be one of uncomplicated or of diphtheritic croup. This was the fact in the case with the recital of which this paper opens. Fragments of false membrane were coughed up before any diphtheritic patches were seen upon the tonsils. In this view of the subject, then, remembering the deadly nature of the diphtheritic poison, does not prudence dictate that we should at once administer those remedies which experience shows to be antidotal to it and which can be of no injury should it not be present, at the same time withholding such methods of treatment as would be contra-indicated by its existence? It will not do to wait until "the little one has become a thousand" and every arteriole and capillary is clogged with the sluggish, poisoned tide. We must destroy the germs before they have a chance to multiply.

I feel the less hesitation in urging a new departure in the management of this disease, so fearful alike in its course and in its termination, from the conviction that no plan can be suggested which will give more lamentable results than those which are universally acknowledged to follow that recommended by the systematic text-books.—*Philadelphia Medical Times*.

A GUIDE TO THE EXAMINATION OF URINE

Continued from our last.

BILE IN THE URINE.—The presence of bile in the urine can seldom be overlooked, since it gives a dark greenish brown color to the secretion. Two substances must be tested for, the bile pigments, and the bile acids, each of which must be looked for separately.

The bile pigments. Gmelin's Test. Ordinary nitric acid, which nearly always contains some nitrous acid, is poured into a test tube to the depth of half an inch. A portion of the urine to be examined is then gently poured down the side of the tube, held almost horizontally, on to the surface of the acid, so that the two fluids may touch but not mix; this operation is most conveniently performed by means of a pipette. At the line of contact, a zone of reaction appears in every urine; but if pigment be present, the zone above becomes first green, then violet, blue, and red, representing the various stages of oxidation of the coloring matters; the most characteristic are green and violet. This reaction may also be performed by allowing a drop of nitric acid, and of the urine to be examined, to run together on a porcelain dish, when the play of colors mentioned above will be observed at their line of contact.

Caution. Any urine which contains a large quantity of indican will give a blue or violet, and even green, color with nitric acid. This is a frequent occurrence in cases of melanotic cancers, when the urine often has a dark brown appearance.

The bile acids. *Pettenkofer's Test.* Some of the fluid containing the bile acids, is placed in a porcelain dish, and a drop of saturated solution of cane sugar added; strong sulphuric acid is then dropped into the mixture, taking care that this acid is clearly in excess of the amount of bile acid present, i.e. about the same volume as the fluid containing the bile acids. On applying heat (which must only be moderate) a beautiful cherry-red color is produced, passing into a deep purple. The purple color is the only reaction characteristic of the presence of bile acids.

Another, and perhaps a better, way of performing Pettenkofer's test is to pour the fluid containing the bile acids into a test tube; sulphuric acid being then added, at first in small quantity to precipitate the bile acids, but afterwards in amount sufficient to re-dissolve them, which renders the mixture perceptibly hot to the hand. A drop of syrup may now be let fall into the fluid, which then shows a play of colors passing from pink to cherry red, and from red to purple.

This test should never be applied directly to urine: setting aside the fact that the bile acids are never in sufficient quantity to give the reaction, the urine in jaundice frequently contains a small quantity of albumen which gives a reddish violet reaction with sugar and sulphuric acid, while the action of the acid upon the other constituents of the urine renders it impossible to be sure of the distinctive colors of Pettenkofer's test. If, therefore, it be very desirable to ascertain whether the bile acids be present in the urine, the method introduced by Hoppe must be employed for their separation; a long and somewhat complicated process, which can seldom be adopted by the clinical student.

With this object the urine must be rendered faintly ammoniacal with caustic ammonia, and then diacetate of lead added, so long as a precipitate occurs. The precipitate must be collected on a filter and washed with distilled water; then boiled with alcohol over a water bath, and filtered while hot; to the filtrate a few drops of potash or soda are to be added, and the solution evaporated to dryness over a water bath. The residue is again to be boiled with absolute alcohol over a water bath until but a small quantity is left. This must be then shaken with ether in a stoppered bottle, and after some time, the alkaline salts of the bile acids will crystallize out. In order to prove that these crystals are salts of the bile acids, they must be dissolved in a little distilled water, and tested with Pettenkofer's method, as directed above.

Clinical Import. The bile pigments and the bile acids are present in the urine in most cases of jaundice. In hot weather, the bile pigments may sometimes be detected by means of Gmelin's test, in the urine of persons who are not jaundiced. The quantity of bile acids present is usually not more than .02 per cent.; the smallness of the amount in the

urine being probably due to their oxidation after entering the blood.

UREA.—The clinical student may sometimes wish to know if the urine contain urea, or if a given fluid be really urine, or some other secretion. The fluid is first to be tested for albumen, which, if present, must be removed by acidulation with a few drops of acetic acid, raising the temperature of the fluid to the boiling point, and filtering. This filtrate is used for the subsequent operations of evaporation, etc., as stated below.

If the urine is free from albumen, some quantity, 2 or 3 fluid-ounces, must be evaporated in a Berlin dish over a water bath, until the fluid has the consistence of syrup. A water bath is essential, because an open flame would decompose the urea. After the syrupy fluid has completely cooled, nitric acid, as free as possible from nitrous acid, is added, drop by drop, so long as a precipitate is formed. An excess of nitric acid is desirable. Some of these crystals of nitrate of urea, removed with a glass rod and placed under the microscope, show flat rhombic or hexagonal plates closely united to one another.

Clinical Import. Urea is the most important constituent of the urine; a healthy man excretes from 300 to 500 grains in the 24 hours. In some acute diseases, as pneumonia, typhoid fever, and acute rheumatism, it is greatly increased owing to the excessive tissue-metamorphosis, and may be present in such quantity as to give a precipitate, without previous concentration, when the urine is acidulated with nitric acid. In other diseases, as uræmia and Bright's disease, the quantity of urea is below the average.

URIC ACID.—To ascertain if the urine contain uric acid, it is necessary to acidulate about a fluid-ounce of the urine with a fluid-drachm of hydrochloric acid, or strong acetic acid, in a suitable glass vessel, an ordinary beaker being best, and to set it aside, covered with a glass plate, for 24 or 48 hours. At the end of that time, if uric acid be present, reddish brown crystals will be seen attached to the sides and bottom of the glass, or floating on the surface of the fluid. These crystals have the flat rhombic, oval, or hexagonal shape of uric acid; they are soluble in alkalies, and give with nitric acid and ammonia the murexid test.

A healthy man excretes, on an average, about 7 or 8 grains of uric acid in the 24 hours.

Clinical Import. The excretion of uric acid is usually increased *pari passu* with the urea, as in pyrexia, or acute rheumatism, and in chronic liver diseases. An excess of uric acid is observed after an attack of gout; it is often entirely absent from the urine immediately before the paroxysm, and may disappear for days when this disease has become chronic.

HIPPURIC ACID.—Hippuric acid exists in small quantity in the urine in health, but the amount is greatly increased in cases of coræa. The method of preparing it from human urine is troublesome, and will rarely be required to be used by the clinical student. Two or more pints of perfectly fresh urine must be taken, and milk of lime added till the

fluid becomes alkaline; the mixture is boiled and filtered, the filtrate evaporated over a water bath to a syrupy consistence, and then extracted with alcohol; next the spirituous extract must be filtered, and the filtrate evaporated to a small quantity, over a water bath. To this, when quite cold, hydrochloric acid should be added so long as crystals are formed.

The crystals of hippuric acid obtained in this manner, seen under a microscope, are long and needle-shaped prisms; they are distinguished from those of benzoic acid by their insolubility in ether.

Hippuric acid, when evaporated to dryness with nitric acid, in a porcelain crucible, over a lamp, and then further heated to redness, gives off a gas smelling like oil of bitter almonds. This reaction is common to benzoic and hippuric acids.

When benzoic action is taken by the mouth, it is converted in the body into hippuric acid, which appears in the urine in quantity equivalent to that of the benzoic acid ingested.

CHLORIDES.—Chlorides may be known to be present by the following test. To a fluid-drachm of urine in a test tube, a drop of nitric acid is added, and then a few drops of a solution of nitrate of silver; if a trace of chloride be present, a cloudiness only will be given; but if any quantity, a white precipitate is thrown down, soluble in caustic ammonia and reprecipitated thence by the addition of nitric acid in excess.

The nitric acid is added at first to prevent the precipitation of the phosphates with the chlorides.

By far the greater part of the chlorine in the urine is in combination with sodium.

A rough comparative idea of the quantity of chloride present may be made from day to day, by always taking the same quantity of urine, acidulating it in a test tube with nitric acid, and adding a solution of nitrate of silver until no further precipitate is formed. The test tube must then be set aside for 24 hours and a note then taken of the proportion of the chloride of silver deposit, for comparison with other observations.

On an average, a healthy male adult excretes 250 grains of chloride of sodium in the 24 hours.

Clinical Import. The chlorine is diminished or entirely absent during the period of hepatization in acute pneumonia; it is also diminished in acute rheumatism and many pyrexial diseases, especially when large serous transudation takes place.

PHOSPHATES.—The presence of phosphates in the urine may be ascertained by the following test. A fluid is prepared by adding a drop or two of caustic ammonia to a fluid-drachm of a solution of sulphate of magnesia in a test tube; hydrochloric acid is added until the precipitate caused by the ammonia is re-dissolved. Caustic ammonia is again added in excess, until the fluid is strongly ammoniacal. A fluid-drachm of urine is now poured into another test tube, and rendered ammoniacal with caustic ammonia; to this urine some of the prepared solution is added, and a precipitate of the ammoniaco-magnesian phosphate occurs at once, if the urine contain the ordinary amount of phosphates; but the

precipitate forms slowly, if the phosphates are present in very small amount.

The normal quantity of phosphoric acid excreted by a male adult in the 24 hours is about 50 grains.

Clinical Import.—The amount of phosphoric acid in the urine is increased in diseases of the nervous centres, and after great mental application. Acute febrile diseases cause increase of the phosphoric acid from increased tissue-metamorphosis, while in Bright's disease and some forms of dyspepsia the quantity of the phosphates is diminished.

SULPHATES.—The sulphates are at once recognised by the addition to some of the urine, in a test tube, of a drop of hydrochloric acid, and afterwards of a few drops of a solution of chloride of barium; a white precipitate, insoluble in nitric acid, is thrown down.

The quantity of sulphuric acid excreted by a healthy male adult in the 24 hours is about 30 grains.

Clinical Import. The quantity of the sulphates is increased by a full animal diet; very little is known for certain of their amount in disease, and that little is at present of not much importance.

The following table of the amount of urinary constituents excreted by a male adult in the 24 hours is compiled from Dr. Parkes' work "On the composition of the Urine."

Quantity	40 to 50 fluid-ounces.
Total Solids	800 to 1000 grains.
Urea	350 to 600 grains.
Uric Acid	5 to 15 grains.
Chlorine	50 to 150 grains.
Phosphoric Acid	30 to 60 grains.
Sulphuric Acid	20 to 60 grains.

URINARY SEDIMENTS.—When a urinary deposit is to be examined, about 4 or 5 fluid-ounces of the urine should be collected in a tall narrow cylindrical glass, and set aside for a few hours. Cylindrical glasses have, in the writer's experience, succeeded better than conical vessels, since the sloping sides of the latter tend to cause the sediment to collect on them, without falling to the bottom. This is particularly the case with uric acid and renal casts, especially if they are present in but small quantity.

When the sediment has collected at the bottom, the supernatant urine may be poured off, and a drop of the sediment placed on a glass slide, for examination under the microscope.

In looking for renal casts, it is better to use only the very last drops which fall from the vessel, after the rest of the urine is poured away.

Directions for the Microscope.—A drop of the fluid containing the deposit is placed in the centre of the glass slide (which must be absolutely clean), and the drop very gradually covered with a piece of thin glass, (seven-eighths of an inch square is the best size), so as to drive all the air before it, and to prevent any air bubbles being present under the glass. This is best accomplished by the aid of a needle, placing one edge of the thin glass upon the

slide, and resting the other upon the needle, then inclining the needle gradually, until it is horizontal. All superfluous moisture around the glass cover must be carefully removed with a cloth, or with blotting paper. The slide is then ready to be placed under the microscope.

A quarter-inch object glass will be sufficient for the recognition of nearly all the sediments that occur. The tube of the microscope must be moved down until the object glass is about a quarter of an inch distant from the slide; the light from the mirror is now thrown upon the slide at a point immediately under the object glass; the observer should then look through the microscope, placing the instrument with the coarse adjuster in the focus which suits his own eyesight.

Sediments are either organized or unorganized. To the latter belong uric acid, urates, oxalate of lime, phosphates, cystin, &c. To the former, pus, blood, mucus and epithelium, renal casts, fungi, and spermatozoa.

UNORGANISED SEDIMENTS.—Uric Acid.—Uric acid is only met with as a deposit in very acid urine, and is usually accompanied by a considerable sediment of urates. Owing to its peculiar color, varying from a yellow to a brownish red, it can at once be recognised by the naked eye, never being deposited from the urine in colorless crystals.

When the sediment is examined under the microscope, the crystals are at once known to be uric acid, by their reddish brown color, all other crystalline deposits being transparent and colorless. If, indeed, the student is in doubt as to the nature of a crystal, he will never be very wrong, if he judge it to be uric acid when there is a slight tinge of brown visible. The crystals, themselves, have numerous forms; they occur very commonly in rhomboidal, or long oval, plates with acute angles; these crystals are often united so as to form rosettes, or they may be rectangular, barrel shaped, or in hexagonal plates, with two parallel sides longer than the other four.

If the student be not quite sure of their nature, he should add to the specimen under the microscope, a little liquor potassæ or liquor sodæ, which will dissolve uric acid, if present; when dissolved by the alkali, it can be reprecipitated in hexagonal plates by the addition of hydrochloric or acetic acid.

Very small traces may also be detected by means of the murexide test; a small portion of the suspected sediment is placed in a porcelain dish, and a drop of nitric acid let fall upon it; the dish is then gently heated over a lamp until all the nitric acid is driven off, when, if uric acid be present, a beautiful red staining is seen; after cooling, a drop of caustic ammonia should be allowed to roll over the reddened spot, which then becomes purple; if liquor potassæ be used instead of ammonia, the color will be violet. The test does not, however, distinguish uric acid from its salts.

Usually the uric acid is not free when the urine is voided, but it is precipitated by the increase of acidity which always occurs shortly after emission. This is especially the case in the urine of diabetes,

where the whole of the uric acid present may be set free from this cause.

Clinical Import. The presence of free uric acid is no proof that uric acid is being excreted in excess; the only inference to be made, is that the urine is extremely acid. But if free uric acid shows itself immediately after the urine has been passed, it is not improbable that a deposit may be taking place in the pelvis of the kidney, or the bladder; a condition of considerable danger, since it may lay the foundation of a calculus; uric acid, and urate, calculi being the most frequent of all urinary concretions.

URATES.—This deposit is the most frequent and least important of all the urinary sediments. Any febrile condition will lead to this deposit; even a greater amount of perspiration than usual, will be followed by urine that becomes turbid on cooling, as a result of a diminished secretion of water, merely. Urine containing an excess of urates is never turbid when fresh passed; it is only when the urine has cooled, that the peculiar muddiness is observed. If the urine be gently warmed, the turbidity immediately disappears. The urates differ in color considerably, according to the amount of coloring matter in the urine, varying from white to pink or red. In young children the 'milky' urine, which alarms mothers, is due to a deposit of peculiarly white urates.

In the urine, uric acid is found combined with three bases; with soda, with ammonia, and with lime. The urate of soda is the most frequent of the three, and is usually seen under the microscope as an amorphous deposit; sometimes it forms round dark bodies with short spikes projecting from them. The urate of ammonia is rarer, and occurs in beautiful globular forms with spikes closely resembling the urate of soda, but of greater length. The urate of lime is very rare, and forms only an amorphous sediment. If any doubt be entertained as to the nature of these salts, it is necessary to add a drop of hydrochloric or strong acetic acid to the specimen, when crystals of uric acid will immediately be formed. These crystals are again dissolved by caustic soda or potash. If further evidence be required, the murexide test with nitric acid and ammonia may be applied.

OXALATE OF LIME.—Oxalate of lime occurs as a urinary sediment in colorless octahedral crystals, having the so-called 'envelope' appearance which, when once seen, can hardly be mistaken for anything else. This deposit also occurs in colorless dumb bells.

Oxalate of lime is insoluble in acetic acid; by this it is distinguished from the phosphates; it is colorless and insoluble in alkalies, and thus differs from uric acid. It is, however, soluble in the mineral acids, as, for example, in hydrochloric acid.

Clinical Import. After urates, oxalate of lime is the most common unorganized urinary sediment; it is often seen in the urine of patients convalescent from acute diseases; and many writers state that it may always be found when there is lessened oxidation, as in bronchitis. The occasional presence of a few crystals of oxalate of lime is not of much import-

ance. When the deposit is constant, and in large quantity, the formation of the mulberry calculus may be feared. This sediment is said to be associated with a dyspeptic and hypochondriacal condition, sometimes termed the "oxalic acid diathesis."

PHOSPHATES.—The phosphates are only separated from very feebly acid, or alkaline, urine; and they are always deposited when the urine undergoes the alkaline fermentation; they consist of the ammoniaco-magnesian phosphate and the phosphate of lime.

Under the microscope the ammoniaco-magnesian phosphate appears in beautiful right rhombic prisms, which disappear immediately on the addition of acetic acid, and are thus distinguished from the oxalate of lime, with which an inexperienced observer might, perhaps, confound them.

The phosphate of lime chiefly occurs as an amorphous deposit, soluble in acetic acid; it is precipitated by heat in flakes resembling albumen, which are at once, however, dissolved by a drop of acid.

Clinical Import The deposit of phosphates indicates an alkaline reaction of the urine, a condition favorable to the formation of phosphatic calculi.

If the least doubt be left upon the observer's mind after the microscopical examination of a sediment, he must use the assistance of reagents in determining its nature. The following scheme will be found useful; a drop of strong acetic acid should be placed on the glass slide, near the thin covering glass, so that the acid may run in between the two pieces of glass, but it should be carefully prevented from wetting the upper surface of the cover, as this will produce an obscurity over the object. Should the deposit be phosphatic, the acid quickly dissolves the crystals, or amorphous sediment; but if the sediment consists of urates, crystals possessing the well-known shape of uric acid are formed. If no effect upon the sediment is produced by acetic acid, it consists of either uric acid, or oxalate of lime. Liquor potassæ added with the same precautions as acetic acid, brings about a solution of the crystals of uric acid, but the alkali has no effect upon oxalate of lime, which will be dissolved by the action of hydrochloric acid.

CYSTIN.—Cystin is a rare deposit in the urine; it occurs in colorless hexagonal plates, united by their flat surfaces, and overlapping one another. When dissolved in the urine, cystin may be thrown down by the addition of acetic acid, and the precipitate examined under the microscope. It may be distinguished from uric acid, which sometimes crystallizes in hexagonal plates, by the absence of color in the crystals.

Urine which contains cystin is usually feebly acid, of a yellowish green color, and of a peculiar odour, compared to sweet briar, but which sometimes resembles that of putrid cabbage. The urea and uric acid are diminished in most cases. The ammoniaco-magnesian phosphate often accompanies the crystals of cystin.

Cystin contains a large quantity of sulphur, and Liebig has proposed a test which is founded on this fact. A solution is made by adding, to a small quantity of solution of acetate of lead, liquor potassæ or liquor sodæ until the precipitate first formed is

redissolved; about equal parts of this solution and of urine are boiled, when black sulphide of lead is formed from the combination of the sulphur with the lead. This test is, however, by no means a good one, since many bodies frequently present in the urine, e.g. albumen, contain enough sulphur to give the reaction.

Of the *Clinical Import* nothing is known.

The appearance of cystin in the urine is believed by some to be hereditary and to be connected with calculous disorders. Other observers have found it in the urine of chlorosis.

LEUCIN AND TYROSIN.—Leucin and tyrosin are very rare deposits in the urine. Under the microscope leucin appears in dark globular forms, which have been compared to masses of fat cells; tyrosin, however, crystallises in beautiful bundles of delicate needles, sometimes arranged in a stellate form.

These two bodies have been detected in the urine in cases of acute yellow atrophy of the liver, of small pox, and of typhus fever. The clinical value of their presence is, however, unknown.

DIET AND THE DIGESTIBILITY OF FOOD.

By JABEZ HOGG, Esq., F.R.C.S.

In the treatment of many diseases, attention to diet is of the utmost importance. It is very necessary in disorder of the digestive and urinary functions, in chronic or long-continued diseases of the assimilating or converting organs in which the appetite is impaired or even decreased. The patient should be very particular in the employment of a diet neither improper from the quantity nor quality, as this would retard the best-directed efforts of medical aid.

Several kinds of diet are usually recommended in the various forms of disease, the most important being:—

Animal Diet.—This term is applied to a diet composed principally of animal food; but, in speaking of a diet of this kind, it is usual to permit the use of eggs, cheese, new milk, beef tea, mutton broth, and such like articles to be taken with a proportionate amount of animal food. There are but few diseases requiring a diet exclusively of this kind; the most important are—diabetes, scrofula, and those cases wherein it is desirable to combine a highly stimulating and nutritious diet.

Vegetable Diet is termed spare diet. This is used to indicate the employment of vegetable substances principally, not exclusively. It in general includes the use of fish, with a small quantity of poultry and butter. In full habits this diet is ordered, if apoplexy or gout is threatened; and by its adoption we diminish the quantity of nutritive matter supplied to the system, while we keep the digestive organs actively employed.

Milk Diet.—Besides cow's milk, this diet includes the use of farinaceous substances, such as arrowroot, sago, tapioca, rice puddings, and bread. Milk diet is ordered when it is necessary to support the system with the least possible stimulus or

excitement. It is well adapted for inflammatory diseases of the chest, of the stomach, bowels, and bladder. After bleeding from any internal part, when the powers of life have been gradually exhausted, a light diet is very beneficial; it is also considered a preventive and curative of gout. In the diseases of children, especially those of a scrofulous nature, it is highly recommended.

Low Diet.—In acute inflammation, in fever after serious accidents, operations, and after childbirth, a low diet is absolutely necessary, consisting principally of slops, such as tea, weak broth, barley-water, and toast-water. Small quantities of milk and farinaceous matters, in the shape of gruel and arrowroot, are sometimes added.

Full or Common Diet.—On many occasions, where it is desirous to restore or support the powers of the system, patients are permitted to satisfy their appetites with plain vegetable and animal food. In many indolent diseases, in some affections of the nervous system, as epilepsy, &c, and in convalescence after illness, this kind of diet is frequently of much service.

A physician observes:—"Many of our customs, manners, and habits are prejudicial to health. Some of them are physical, while others are moral in their effects. Nothing more plainly betrays our ignorance of even the principles of health, and at the same time our slavish submission to selfish indulgence, than the custom of *eating suppers*—by which we do not mean the mere eating a slice of bread and cheese, but of making a meal at that time. Instead of allowing the body, with its multifarious powers, to be refreshed by "Nature's best restorer, balmy sleep," and the mind to be relieved from care and thought, irritation, and excitement, the stomach is loaded with (probably) a heterogeneous mass of food, and the whole machinery of the inward man is forced into sluggish operation when the vital powers are at the lowest ebb; the brain, feverish and disturbed, sends forth startling visions and horrifying dreams until morning dawns, when the haunted imagination recovers itself, and is conscious of the mental and bodily vigour being rather exhausted, than refreshed by the night's turmoil. We would not have touched upon this subject, but we are aware that—notwithstanding all the evils which are known to follow in its train—the practice of nightly repletion is still too common."

It now becomes our duty to inquire into the properties and effects on the stomach, of the articles of food employed to supply the waste of our bodies, and maintain us in health. The suitability of particular kinds of food to the varied constitutions of man is not made that study and science its importance deserves.

Milk.—This causes wind and acidity in some stomachs, which effects can be remedied by mixing about half an ounce of lime water to each pint. Milk, when it agrees with a person, is useful in scrofulous affections, and where debility and morbid sensitiveness exist, in early stages of consumption of the body, in cases of enlarged glands, diseased

affection of the joints, and in continued rheumatism of the joints. A milk diet is not sufficient for any one having continued and active exertion, but it is for those who are invalids. Asses' milk is not so nourishing, but more easily digested than that of the cow. Goats' milk contains matter of a peculiar taste and odour, which requires an invalid to have good, pure air and some exercise to easily digest.

Rare Milk is not commonly used abroad, and we may observe that, when boiled, it proves more agreeable to the stomach. If, after boiling, it be put into bottles, and well corked, or in tins soldered up, it will keep during many months. Milk may also be purchased in small cases prepared for long voyages. This is made by gently simmering the milk until nearly all the water is evaporated; it is then cooled and kept carefully from the the action of the air, remaining in a solid state for use; when required, a piece is put into the cup of tea or coffee. The most certain method for voyagers is to take with them a supply of patent concentrated milk or cream, which prevents disappointment at a time when it is impossible to procure so useful an article in illness, &c. Or an excellent substitute may be secured by laying in a supply of cocoa and chocolate, having the milk and sugar ready combined with them.

Skimmed Milk is more easily digested, and not much less nutritive, than that in the state as fresh drawn from the cow.

The article called *Sugar of milk* may be purchased at any druggist's shop, and is occasionally used instead of milk.

Butter always irritates the digestive organs of those suffering from indigestion, and especially when on toast, or in a melted state. Butter is best when fresh, well made, and from a cow fed on grass. Salt butter is never so good as fresh, and yet a little salt on fresh butter facilitates its digestion. The utility of butter to the invalid can only consist in having a solvent effect on the bowels. It is generally thought better to prevent children indulging in this oleaginous matter, by placing before them plain palatable food, for which they have some liking, as milk and bread, oatmeal porridge, &c.

Cheese, when toasted, is more easily digested than when not so; the richer, and also the more mature it is, the better. Decayed cheese, in some cases, stimulates and assists a weak stomach in the digestion of food. Good ripe cheese contains a large amount of nourishment, and is, with a little home brewed beer, a very wholesome meal. *Cream Cheese*, when fresh and unteinted, is as digestive as ordinary ripe cheese.

Whey is an excellent drink in all febrile disorders, at the same time it is nutritive and diluent to the body. *Wine Whey*, taken warm, promotes the action of the skin, and is a valuable domestic remedy in *colds* and *influenza*; *Tamarind Whey* is preferred by some people; it is prepared by boiling two ounces of tamarinds into two pints

of milk, and then straining it through a sieve. Cream of Tartar also makes an excellent whey.

Eggs.—The yolk is best suited to a very delicate stomach when lightly boiled, but the white, even in a pudding, may prove unpleasant to it. The entire of a raw egg is one of the most easily digested articles of diet known. Eggs lightly poached are preferable to boiled ones, while those hard boiled are the worst to digest; still to persons undergoing great exertion in the open air, a few hard-boiled eggs prove an excellent substitute in the absence of a regular meal; adding a little salt assists digestion. Eggs ought to be used very fresh, as they speedily, from their nature, undergo decomposition. Immersed in vinegar and water or quick lime they will keep for some time. The eggs of the duck and goose are less digestible than those of the hen and wild birds.

Eat is not so digestive as lean, nor does it possess nutritive properties; it is called a calorifiant, that is, maintains the animal heat; thus we find the inhabitants of cold climates indulge most enormously in it, while in warm climates it is neither relished nor does nature supply it. It is useful as a dilutant of the other portion of the food.

Bread baked in small loaves as toasted before a hot fire, and not eaten new, being freed from the effects of fermentation, is the most easily digested. Bread containing bran is occasionally useful for irritating the stomach and bowels, and thus preventing constipation; but, if continued, the coarse particles are apt to lodge in the intestines, which is followed by severe derangement, requiring medicine for their removal. To those much troubled with indigestion, fresh biscuits preserved from the air or damp are the most suitable, especially those made for use at sea.

Toast.—In the act of toasting bread we wish to get out the water, which makes the bread cold, waxy, and heavy of digestion. Perhaps we shall be best understood if we first explain what makes bad toast of a slice of bread, or rather what makes it no toast at all, but merely a piece of bread with two burnt surfaces, more wet and waxy in the heart than ever, and which not a particle of butter will enter, but only remain upon the surface, and if vexed with additional fire, turns to a rancid oil of the most unwholesome description. If the slice of bread is brought into close contact with a strong fire, the surface becomes covered with, or rather converted into, charcoal before the heat produces any effect upon the interior of the slice. This being done, the other side is turned, and converted into charcoal in the same manner. Charcoal, as everybody knows, is one of the worst conductors of heat. It is of no consequence whether the said charcoal be formed from wood, flour, or any other substance, for its qualities are in every case the same. Now, when the surfaces of the slice of bread are charred over in this manner, there is an end of toasting, as no action of heat can be communicated to the interior, and not one drop of water can be evaporated. In this state the slice of bread may be wholly burnt to charcoal, but until it is altogether so burnt, the unburnt part

will become always more wet and unwholesome. There is an illustration of this in putting a potato in the middle of a strong fire in order to be roasted. If the fire is but hot enough a potato the size of one's fist may be burned down to a cone not bigger than a marble, and yet that cone will remain hard and scarcely warmed.

Chesnut-brown will be far too deep a colour for good toast; the nearer you can keep it to a straw-colour the more delicious to the taste, and the more wholesome it will be. If you would have a slice of bread so toasted as to be pleasant to the palate and wholesome to the stomach, never let one particle of the surface be charred. To effect that is very obvious. It consists in keeping the bread at the proper distance from the fire, and exposing it to a proper heat for a due length of time. By this means, the whole of the water may be evaporated out of it, and it may be changed from dough—which has always a tendency to undergo acetous fermentation, whether in the stomach or out of it—to the pure farina of wheat, which is in itself one of the most wholesome species of food, not only for the strong and healthy, but for the delicate and diseased. As it is turned to farina, it is desintegrated, the tough and glucy nature is gone, every part can be penetrated, it is equally warm all over, and not so hot as to turn the butter into oil, which, even in the case of the best butter, is invariably turning a wholesome substance into a poison. The properly toasted slice of bread absorbs the butter, but does not convert it into oil; and both butter and farina are in a state of very minute division, the one serving to expose the other to the free action of the gastric fluid in the stomach; so that when a slice of toast is rightly prepared, there is not a lighter article in the whole vocabulary of cookery.

Yeast Dumplings,—are only good for those with strong digestion, and who have laborious out-of-door employment.

Vermicelli and *Maccaroni* are made from a hard, small grained wheat; the flour is made into dough, and dried until hard; whether simply stewed, taken with the gravy of meat, or used as a vegetable, they seldom disagree even with a weak stomach. If boiled until soft, and eaten with French mustard or jam, it makes a soluble and wholesome dish, which may even be taken by invalids.

Puddings are usually better than *Pies* for those affected with indigestion, especially if made with milk and eggs, instead of butter, lard, suet, or treacle. Baked puddings are not so good as boiled, and those done under meat are objectionable for weak stomach. The simplest form of constituting puddings is that of flour, eggs, and milk. Pancakes fried in fat are not good.

(To be continued.)

REMARKS ON THE TREATMENT OF VENEREAL WARTS AND CONDYLOMATA.

By WM. BERRY, M.R.C.S. Eng., L.R.C.P. & S. Ed.

The obstinacy to treatment of warts or vegetation of venereal origin situate on or near to the organ

of generation is sometimes very great, for in some cases they will, in spite of active treatment, reappear and spread again and again.

The most persistent of this class of growths are those which are small, have a well-defined and broad base, and are covered with a thin cuticle, and thus resemble very closely enlarged papillæ met with in other parts of the body. These warts will sometimes resist the most active agents, such as strong nitric acid, and even removal with scissors will fail to eradicate them, as they reappear in greater numbers with surprising rapidity.

In two cases under my care lately, the daily application of a strong solution of sulphate of copper, the application of fuming nitric acid every second day, and removal with the scissors failed to effect a cure. The saturated solution of sulphate of copper appeared to stimulate them, and, as the nurse remarked, caused them to grow more rapidly.

In these two cases it was often remarkable to see the reappearance of these growths after the application of strong nitric acid, for no sooner was the yellowish slough removed than they appeared as large as ever; on one occasion the acid was applied after their removal with scissors.

Almost despairing in being able to rid the patients of these pests, I resolved to try the acid nitrate of mercury (liquor acidus hydrargyri nitratis), though with little faith in its efficacy, after having failed with nitric acid.

In both cases (females) the warts grew on the perineum, around the anus, and on the skin and mucous membrane of the labia majora. I oiled the parts around and applied the acid nitrate of mercury freely, by means of a firm pledget of lint, intending to do so again daily if required. Next morning, however, to my surprise, the warts had become much shrunken and appeared to be covered with a yellowish white slough, the patients complained of feeling very sore, and had been painted since the application. Poultices of linseed meal were now applied, and when the parts were cleaned the warts had almost completely disappeared (a second application removing them), and the skin where they had been was quite healthy.

In some cases, where the warts are one large granulating mass, giving forth an offensive discharge, removal with the *écraseur* will be required; but in those cases where they cover a large surface the application of the acid nitrate of mercury will be found to be the best remedy.

What part the mercury plays in its caustic or escharotic properties I am unable to say, but certain it is that the remedy is superior to strong nitric acid.

With regard to the treatment of condylomata, I only wish to add that, besides the cleansing with water, keeping the surfaces dry, and applying calomel powder, the application of strong nitric acid once or twice to the surfaces will greatly assist in their cure, especially in those cases where they are numerous and cover a large surface, resembling very closely buttons set in close approximation.

Workhouse Hospital, Manchester.

HYPODERMIC INJECTION OF ERGOT IN VARICOCELE.

In a case of varicocele which had existed for a long time, Dr. Bertarelli, of Rome, injected a solution of ergotine under the skin of the scrotum. The solution consisted of ergotine, 1 gramme; water, with a little alcohol, 2 grammes. The patient was ordered to maintain absolute repose and to make local application of cold compresses. The next day the varicosities had disappeared. The success was complete after another injection, which was attended by but slight local reaction.

Dr. Cittaglia had cured another case of varicocele by the same treatment. By the eighteenth day nearly all the varicosities had disappeared; and there was nothing but a slight induration of the corresponding testicle to be observed.—*Alm. di Terapia*, 1874, *Lo Sperimentale*, March, 1874.

A man was recently examined in this city who could expand his chest from 32 to 40 inches. As several members of his family had died of consumption, he had for some years past cultivated the habit of expanding his chest to the utmost, in the hope of thereby diminishing his liability to have the same disease.—*N. Y. Medical Record*, May 15.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND

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MONTREAL, JULY, 1874.

THE CANADIAN MEDICAL ASSOCIATION.

On Wednesday, the 5th of August, this Association will assemble at Niagara Falls, and within sound of the roar of that mighty cataract, will, we have no doubt, have a profitable and a pleasant time. From what we can gather we believe that the attendance will be very large, and thus demonstrate to those who have predicted its death—that it is full of life and vigor. The committee of arrangements, with its active chairman, Dr. Canniff of Toronto, has been at work, and have completed those very essential details which tend to make such an occasion pleasant, and one ever to be remembered with satisfaction. We believe that some, at all events, of those who were named last year at St. Johns to read papers at this meeting, will be on hand, and do their best to perform the task which was assigned them.

According to a resolution passed at the meeting held in Montréal, in 1872, the Medical Bill, which occupied so much time in the early history of the Association, should again be brought forward for discussion. We do not know whether it is intended to again seriously take this Bill into consideration. We hope, however, that at least an opportunity will be given our Ontario friends to say whether they are yet willing to assist in having a Dominion Act passed. As a Dominion we are singularly placed with regard to the practice of medicine. Provincial barriers meet our brethren, which certainly should not exist. If the profession would only bury sectional jealousies, we might obtain—what we believe we must obtain before the profession in Canada can assume its rightful exalted condition—viz., a central examining board. Let us have one common portal by which to enter the domain of medicine. There is nothing which would so tend to make our profession esteemed—nothing which would make it so conscious of its own powers.

There is some little talk, as to whom should be president for the ensuing year. If the Association should decide that the office should not be held more than one year by the same person, we think that Ontario should again have the honour conferred upon it, of having the President from that Province. We do not wish to say upon whom the honour should be bestowed; but we think that the city of Toronto has some members of the association, who, from the active part they have taken in its welfare ever since its organization and from the high position which they hold in the profession, are worthy of the honour. We cannot close without saying that in our opinion the Association did itself honor last year at St. Johns in electing as its President, Dr. William Marsden, of Quebec, one of the most active of those who in future time will be honored as its founder in 1867—in the good old city of Quebec. He has ever been zealous in its welfare, and has done much to ensure its present prosperous condition.

TRI-ANNUAL MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

The tri-annual meeting of this body was held at Sherbrooke, P. Q., on Wednesday the 8th July. The following members were present,

Drs. Scott, Howard, Peltier, Rottot, Robillard, Millette, Francis W. Campbell, Hingston, Brigham, Gibson, Duchesneau, Russell, Rinfret, Tessier, Belleau, Marmette, Tetu, Pelletier, de St. George, Gilbert, Hamilton, Worthington and George E. Fenwick.

Dr. Scott, Vice-President, occupied the chair; and opened the proceedings with a few remarks. He stated that they had as yet been unable to have the books of the Treasurer audited, but promised that they would be by the time of the half-yearly meeting of the Governors in October at Quebec. The following gentlemen were elected members of the College, Drs. Reddy, Gardner, Trenholme and Kennedy of Montreal, and Drs. Millette, de St. George, F. X. Perrault, Scholfield.

Twenty-seven proxies were handed in, making the total number of votes represented fifty.

Mr. Nathan Mercer, President of the Pharmaceutical Association of the Province of Quebec, was present. He submitted to the College a draft of a Bill which they were desirous of having passed by the Quebec Legislature, and requested the co-operation of the College. The committee to which had been committed this bill for its examination, reported to the College in its favor, and suggesting one or two minor alterations. Some discussion ensued, but eventually it was carried unanimously, that the report of the committee should be received and adopted.

The election of Governors to serve for the next three years then took place, and resulted as follows:—

For the City of Montreal.—Drs. Scott, Howard, Peltier, Rottot, Godfrey, Hingston, Robillard, and G. E. Fenwick.

For the District of Montreal.—Drs. Chamberlin, Weillbrenner, Brigham, Gibson, Church, Duchesneau, and F. X. Perrault.

For the City of Quebec.—Drs. J. E. J. Landry, R. H. Russell, Jackson, Tessier, Rinfret, Robitaille, Rousseau, and Belleau.

For the District of Quebec.—Dr. Michaud, L. J. E. Desjardins, Marmette, Dubé, Teu, P. Pelletier and St. Georges.

For the District of St. Francis.—Drs. Worthington, Gilbert and Hamilton.

For the District of Three Rivers.—Drs. J. J. Ross, A. G. Fenwick and Landry.

The Governors elect then proceeded to

chose by ballot the officers for the ensuing term of three years, with the following result:

President, R. H. Russell, M.D., Quebec;
Vice-Presidents, Drs. R. P. Howard and Marquette.

Secretary for Montreal, H. Peltier, M.D.

Secretary for Quebec, A. G. Belleau, M.D.

Registrar and Treasurer.—E. Robillard, M.D.

It was decided that the next tri-annual meeting should be held in the town of Three Rivers.

Previous to the members taking their departure, they were entertained by the Governors of the College for the district of St. Francis, at dinner at the Magog House. A very pleasant time was passed.

TO CORRESPONDENTS.

Dr. F., St. Paul's Bay. The question you raise as to the advisability of a legal medical tariff is one which is extremely difficult of accomplishment, although we think that it would be a very great boon to the profession. We fear, however, that the jealousy which so many medical men have of their confreres will prevent such a desideratum being arrived at in our day. Your quiet little place seems anxious to emulate more pretentious localities, for the grievance you complain of, viz., having in a suit to submit your account to the approval in court of another medical man, who in all probability will state it is too high, is one which is universal. It is a grievance which has in many instances prevented medical men from suing for services rendered, and which are justly entitled to remuneration. They preferred to loose all, than run the gauntlet of the "glorious uncertainty of the law." You mention that within your knowledge a physician lately in evidence before a court of justice, stated that he considered three dollars ample remuneration for full twenty-four hours professional service, without regard to distance travelled. Such a statement is extraordinary. Perhaps, however, the physician knew the value of his services, and rated them accordingly. It is a shame, however, that such a man should ever be called upon to judge the value of another man's services.

Dr. M.—The patient being under the care of another medical man, under no circumstances should you visit the patient without his knowledge if "even only to express an opinion." Act as you would desire others should act toward you. If you follow this rule, we don't think you will go astray.

Dr. Mc.M., Rigaud.—Charlatans are numerous everywhere throughout the country. We hope the College of Physicians and Surgeons at its next semi-annual meeting will decide to act promptly and decisively with reference to this matter. The claims of its licentiates have been long enough neglected. It is time that the College carried out some of the many promises which were made at its organization some twenty-seven years ago.

Dr. P., Brantford.—We hope you note the day of meeting of the Canadian Medical Association at Niagara Falls. The date previously announced in the Record was wrong. The time of meeting is August 5th.

TO OUR SUBSCRIBERS.

With the present number Volume 2 of the Canada Medical Record is brought to a close. We are very thankful for the kind encouragement we have received from every portion of the Dominion, and can only promise that we will try to sustain the reputation which it has already established—of a thoroughly *practical* medical journal. Our circulation has steadily increased, and we to-day have on our books two hundred and sixty-four more subscribers than we had when we commenced this volume. This is the pleasant side of the story. We have, however, we regret to say a few who have taken the journal for two years, and have never paid anything for it. We know how much they like the *Record*, how anxiously they have looked for it each month, and how greatly they have been benefited from its perusal. We are sorry we will in the future not be able to supply them at the same rate. All such will after this issue be struck from our list, and their accounts placed for collection. We invite attention to a Business notice in another column. Each subscriber will at a glance be able to understand what category he comes under.

BUSINESS NOTICE TO SUBSCRIBERS.

In the *June* number of the *Record*, we enclosed accounts to a number of our subscribers. A great many have promptly replied. Others have not done so. *All who received accounts in the June number, who do not remit previous to the issue of the August number, will be struck off our list.*

In the present issue we enclose accounts to the remainder of our subscribers. *Those who owe for two years and do not remit before the issue*

of the August number will be struck of the list.

Those who wish to continue the *Record* will please take notice of the above and govern themselves accordingly.

A NEW INSTRUMENT.

At the meeting of the American Medical Association, held at Detroit in June last, one of the delegates brought before a full meeting a new instrument which he has invented, and which he styles the "*Compound Back-action Auro-recto Micro-Spectroscopic Speculum*." He insisted and attempted to prove that by its use a diagnosis of piles, ulcer of the stomach, and congestion of the brain could be made out in one sitting or lying, as the case might be. He attempted by a sketch to show the passage of light from the anal to the anal speculum, but he experienced considerable difficulty in making his hearers understand how the light could be made to penetrate the brain of an ordinary patient, and how, in case the colon was impacted the beam of light could be made to reach the diaphragm. The description and the exhibition of the drawing is said to have caused infinite amusement.

THE VALUE OF OATMEAL AS INFANTS' FOOD.

In a communication to the Société Médicale des Hôpitaux, MM. Dujardin-Beaumetz and Hardy make known the results of the employment of oatmeal on the alimentation and hygiene of infants. According to them, oatmeal is the aliment which, by reason of its plastic and respiratory elements, makes the nearest approach to human milk. It also is one of those which contains most iron and salts, and especially the phosphate of lime, so necessary for infants. It also has the property of preventing and arresting the diarrhoeas which are so frequent and so dangerous at this age. According to the trials made by Mr. Marie, infants from four to eleven months of age fed exclusively upon Scotch oatmeal and cow's milk thrive very nearly as well as do children of the same age suckled by a good nurse.

BURGLARS BEWARE!

A "SKELETON IN THE CLOSET" is not generally considered a pleasant thing to have, but a recent occurrence in Greensburg, U. S., shows that it may sometimes answer a good purpose. We learn from the *Philadelphia Medical Times* that a burglar broke into a physician's office in that town, and opening a closet (while his companion with a dark lantern was in another part of the room); got his

hands between the jaws of a skeleton which, being adjusted with a coil spring and kept open with a thread, closed suddenly on the intruding hand by the breaking of the thread. Startled at being thus seized, he uttered a faint shriek, and when his companion turned the lantern towards him and he beheld himself in the grim and ghastly jaws of Death himself, he became so overpowered by fear that he fainted and fell insensible to the floor, pulling the skeleton down upon him, and making so much noise that his companion fled immediately. The doctor, alarmed at the noise and confusion, hastened into the room, and secured the terror-stricken burglar, still held by the skeleton.

PERSONAL.

Mr. Erichsen, the world renowned Surgeon, sails on the 30th July for Canada, as he will visit Montreal we would suggest some means whereby he might be enabled to meet the profession.

Dr. R. A. Stevenson (M.D., McGill College 1871), passed through Montreal early in July en route for London, England, where he intends to pass several months in attendance on the hospitals. Dr. Stevenson has been practising in Strathroy, Ont. Previous to his departure he was entertained at supper, and presented with a purse of one hundred and fifty dollars.

Dr. McNaughton, President of the Albany Medical College, died suddenly in Paris on the 1st of June. We recently alluded to this gentleman as the oldest living medical teacher.

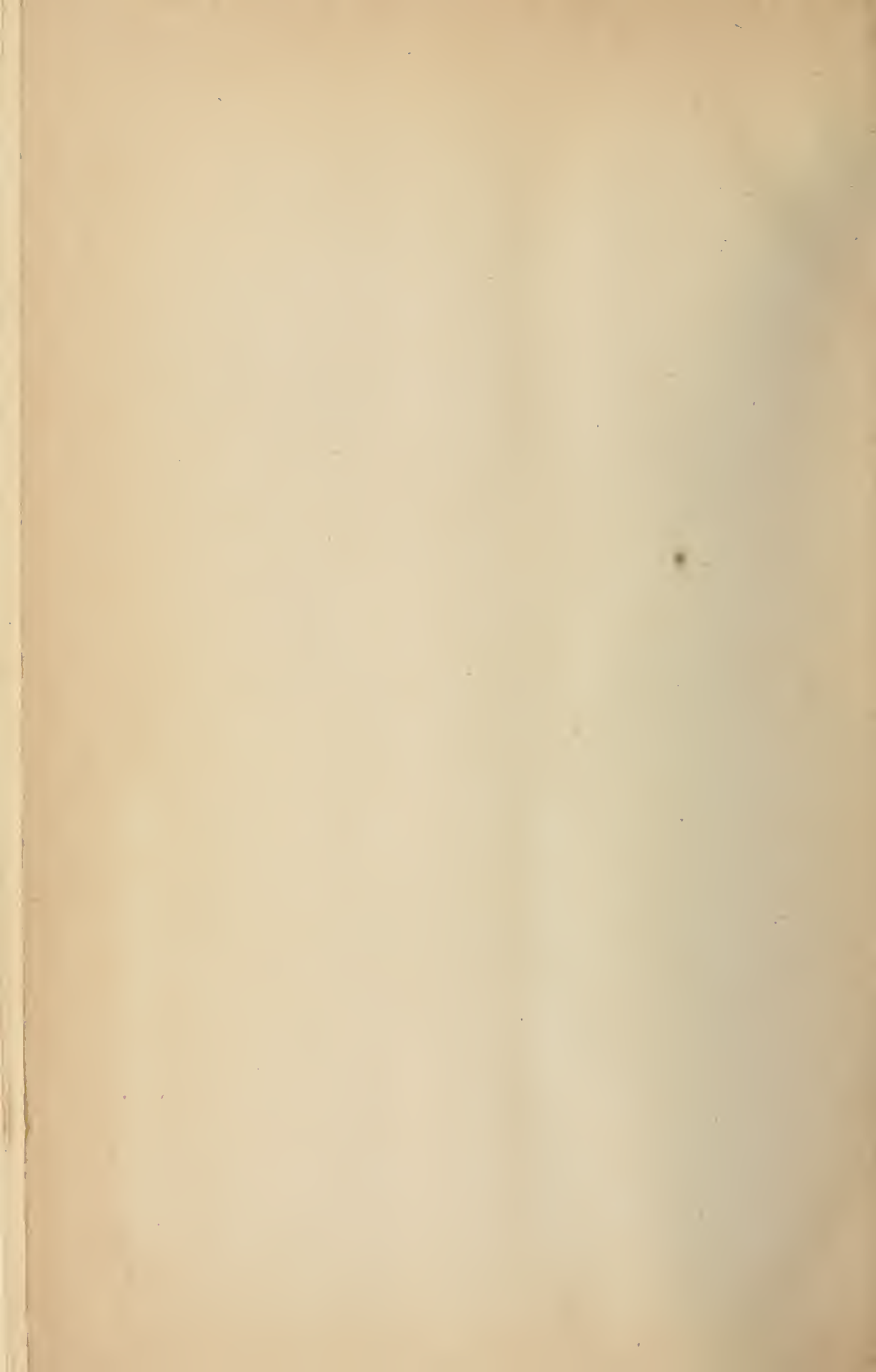
Dr. Richardson, Toronto; Dr. Casgrain, Windsor; Dr. C. B. Hall, Toronto; Dr. Robert Lambert, Windsor; Dr. A. A. Andrews, Windsor; Dr. E. Nesbitt, Sandwich; Dr. George McMicking, Goderich; Dr. F. B. McCormick, Ripon, and Dr. F. F. Bell, Amherstburg, attended the meeting of the American Medical Association, which was held at Detroit, Michigan, on the 2nd of June, and were received with marked attention. Dr. Richardson, of Toronto, acted as the spokesman of the delegation.

Dr. J. G. Kittson (M.D. McGill College, 1869), of Berthier en haut, has been appointed surgeon to the North-west mounted police, at a salary of \$1,400 a year.

Dr. Nesbitt, of Toronto, is said to have received the appointment of assistant surgeon to the North-west mounted police.

Dr. Donald A. McCrimmon, (M.D. McGill College, 1869,) has settled at Lucknow, Ont., where he is now doing a very extensive practice. He is also proprietor of the Lucknow Medical Hall, which does a large business.





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Canada medical record

GERSTS

